



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

December 5, 2016

Kt Woodall
Agent
Sharda USA LLC
c/o Wagner Regulatory Associates, Inc
P.O. Box 640
Hockessin, DE 19707

Subject: Notification per PRN 98-10 – Adding Alternate Brand Name and minor label changes
Product Name: SHARDA METOLACHLOR 86.4EC
EPA Registration Number: 83529-56
Application Date: September 6, 2016
Decision Number: 521551

Dear Ms. Woodall:

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.

The alternate brand name **Meto Star** has been added to the product record.

If you have any questions, you may contact Grant Rowland at 703-347-0254 or via email at rowland.grant@epa.gov.

Sincerely,

A handwritten signature in black ink that reads "Kathryn V. Montague".

Kathryn Montague, Product Manager 23
Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

NOTIFICATION

83529-56

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:

12/05/2016

Group	15	Herbicide
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Sharda Metolachlor 86.4EC

ABN: Meto Star

Herbicide for use in cotton, peanuts, pod crops, potatoes, safflower, grain or forage sorghum, soybeans and tomatoes

ACTIVE INGREDIENT:	WT. BY %
Metolachlor: 2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) acetamide.....	86.4%
OTHER INGREDIENTS:	<u>13.6%</u>
TOTAL:	100.00%

Contains 8.0 lbs. of active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCION

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 INHALED:	<ul style="list-style-type: none"> • Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for further treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor or going for treatment. In case of an emergency involving this product, call CHEMTREC at 1-800-424-9300 .	

Physical and Chemical Hazard: Do not mix or allow coming in contact with oxidizing agents.

[See inside booklet for complete [additional] [First Aid,] Precautionary Statements, and Directions For Use.]

EPA Reg. No. 83529-56

EPA Est. No. XXXXX-XX-XXX



Net Contents: _____

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

Harmful if inhaled, absorbed through skin or swallowed. Causes eye irritation. Avoid breathing vapor spray mist. Avoid contact with skin, eyes or clothing. This product may cause skin sensitization reactions in some people.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below.

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or nitrile rubber ≥ 14 mils, polyethylene, PVC ≥ 14 mils, or Viton ≥ 14 mils
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing, or loading

Follow manufacturer's instructions for cleaning and 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

Mixers and loaders supporting aerial applications are required to use closed systems. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4)). When using this closed system, the mixers and loaders PPE requirements may be reduced or modified as specified in the WPS.

When handlers used 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 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands 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 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

For terrestrial uses, 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 disposing of equipment washwaters or rinsate.

Groundwater Advisory

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Surface Water Advisory

Metolachlor can contaminate surface water through ground spray drift. Under some conditions, metolachlor may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several months post application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

Mixing/Loading Instructions

DO NOT allow **Sharda Metolachlor 86.4EC** to back-siphon into wells, spill, or improper disposal of excess pesticide, spray mixtures, or rinsates.

Check valves or anti-siphoning devices must be used on all mixing and/or irrigation equipment.

Do not mix or load **Sharda Metolachlor 86.4EC** within 50 feet of perennial or intermittent streams and rivers, natural or impounded lakes, and reservoirs. Do not mix or load **Sharda Metolachlor 86.4EC** within 50 feet of all wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of **Sharda Metolachlor 86.4EC** into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash-water, and rain water that may fall on the pad. Surface water shall not be allowed to either flow over

or from the pad, which means that the pad must be self-contained. The pad must be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above-specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site.

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. This labeling must be in the possession of the user at the time of pesticide application.

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 **24 hours**.

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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 over short-sleeved shirt and short pants
- Chemical-resistant gloves such as barrier laminate, butyl rubber ≥ 14 mils, or nitrile rubber ≥ 14 mils, or neoprene rubber ≥ 14 mils, polyethylene, PVC ≥ 14 mils, or Viton ≥ 14 mils
- Shoes plus socks

Failure to follow the Directions for Use, Restrictions, and Precautions in this label can result in poor weed control, crop injury, and/or illegal residues.

Not for sale, use, or distribution in Nassau or Suffolk counties in New York. Aerial application in New York state is prohibited.

Do not apply **Sharda Metolachlor 86.4EC** in windy conditions. Do not allow spray to overlap as crop injury can occur.

PRODUCT INFORMATION

Observe all precautions and limitations on the labels of each state-registered product used in tank mixtures. Tank mixtures are permitted only in states where the tank mix partner product is registered.

FOR ALL TANK MIXTURES: It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Sharda Metolachlor 86.4EC is a selective herbicide that can be used pre-plant surface-applied, pre-plant incorporated, or pre-emergence treatment in water or liquid fertilizer to control listed annual grasses and broadleaf weeds in cotton, peanuts, pod crops, potatoes, safflower, grain/forage sorghum, soybeans and tomatoes. Post-emergence applications of **Sharda Metolachlor 86.4EC** can be made on soybeans.

RESISTANCE MANAGEMENT

Sharda Metolachlor 86.4EC is a Group 15 herbicide. Weed populations may contain or develop plants that become naturally resistant to metolachlor and/or other Group 15 herbicide products. If Group 15 herbicides are used repeatedly in the same field or in successive years as the primary method of control of targeted species, weed species that have developed resistance to Group 15 herbicides can dominate the weed population, resulting in partial or total loss of weed control.

To avoid herbicide resistance:

- Do not use **Sharda Metolachlor 86.4EC** consecutively with other Group 15 herbicides that have similar modes of action on targeted weed.

- Use tank mixtures and premixes from different Groups provided that the products involved are registered for the same use, have different modes of action, and/or are effective at the tank mix or prepack rate on the weed(s) concerned.
- Utilize a comprehensive Integrated Pest Management (IPM) program.
- Monitor treated areas for loss of field efficacy.
- Contact your local state 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.

APPLICATION INSTRUCTIONS

SOIL TEXTURES AND APPLICATION RATES

Where rates are based on soil texture, classes are categorized as follows:

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

Coarse-Textured/Low Organic Matter Soils: Use the lower rate within the specified rate range.

Fine-Textured/High Organic Matter Soils: Use the higher rate within the specified rate range.

APPLICATION METHODS

Apply **Sharda Metolachlor 86.4EC** pre-emergence alone, or in combination with specified tank mix partners following pre-plant incorporated herbicides when used according to label instructions and such use is not prohibited on the respective labels.

Thoroughly clean sprayer/application device before applying **Sharda Metolachlor 86.4EC**. Dispose of cleaning solution in a responsible manner. Do not use a sprayer or applicator contaminated with any other materials to avoid crop damage and/or clogging of the application device.

MIXING INSTRUCTIONS

Mix **Sharda Metolachlor 86.4EC** alone with water or liquid fertilizer and apply as a spray:

- Fill the spray tank $\frac{1}{2}$ - $\frac{3}{4}$ full of water or liquid fertilizer.
- Add the specified amount of **Sharda Metolachlor 86.4EC**.
- Add the remaining water or liquid fertilizer.
- Maintain sufficient agitation during mixing and application to maintain a uniform emulsion.

TANK MIX APPLICATIONS

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank Mixtures:

- Fill the spray tank $\frac{3}{4}$ full with water, and begin agitation.
- Add 2,4-D, AAtrex®, Balan®, Banvel, Basagran®, Butoxone®, Butyrac®, Canopy®, Caparol 4L®, Command®, Cotoran®, Eptam®, Gemini®, Lexone®, Lorox®, Lorox Plus, Marksman®, MSMA, Preview®, Princep®, Prowl®, Pursuit®, AAtrex + Princep, Scepter®, Sencor®, Sonalan®, Starfire®, or Treflan® ensuring products disperse.
- Add **Sharda Metolachlor 86.4EC**.
- Add Gramoxone® Extra, Landmaster® BW, or Roundup® if these products are being used.
- Add the rest of the water.

For tank mixtures with AAtrex, Banvel, Canopy, Caparol 4L, Command, Cotoran*, Eptam, Gemini, Lexone, Lorox, Lorox Plus, Marksman, Preview, Princep, Prowl*, Pursuit, AAtrex + Princep, Scepter, Sencor, Sonalan, Starfire, or Treflan, liquid fertilizers can replace all or part of the water as carrier, except for AAtrex post-emergence and Banvel post-emergence tank mixes. For tank mixtures with AAtrex, refer to the AAtrex label for additional mixing instructions. For each mixture, check compatibility with liquid fertilizers before mixing in spray tank. For all tank mixtures, agitate during mixing and application to maintain a uniform suspension.

*See **Special Mixing Instructions** for tank mixtures with Cotoran, and with AAtrex or Princep + Prowl under the appropriate tank mixture section.

Compatibility Test

Because liquid fertilizers vary, even within the same analysis, always **check compatibility with herbicide(s) prior to use**. Serious compatibility issues are most likely to occur when mixing with complete suspension or liquid fertilizers. Commercial application equipment can improve compatibility. The following test assumes a spray volume of 25 gals./A. For other spray volumes, make appropriate changes in the ingredients. To check compatibility:

1. Add 1 pint of fertilizer to each of 2 one-quart jars with tight lids.
2. To **one** of the jars, add $\frac{1}{4}$ tsp. (1.2 milliliters) of a compatibility agent approved for this use such as Compex® or Unite® ($\frac{1}{4}$ tsp. is equivalent to 2 pts./100 gals. spray). Shake/stir gently to mix.
3. To **both** jars, add the appropriate amount of herbicide(s).

If more than one herbicide is used, add them separately in the following order:

- Dry herbicides first, flowables next, and emulsifiable concentrates last.
- After each addition, shake or stir gently to thoroughly mix.
- The appropriate amount of herbicides for this test is:

Dry Herbicides: For each pound to be applied per acre, add 1.5 level teaspoons to each jar.

Liquid Herbicides: For each pint to be applied per acre, add 0.5 teaspoon or 2.5 milliliters to each jar.

Note: For **Sharda Metolachlor 86.4EC** tank mixtures with AAtrex + Princep, use $\frac{1}{3}$ - $\frac{1}{2}$ the amount of AAtrex specified and the remainder as Princep, depending on whether the 1:2 or 1:1 ratio of AAtrex to Princep is to be applied.

4. After adding all ingredients, put lids on and tighten, and invert each jar 10 times to mix.

5. Let the mixtures stand 15 minutes.

6. After 15 minutes, check jars for chemical separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if a compatibility agent is needed in the spray mixture by comparing the 2 jars. If either mixture separates but can be remixed readily, the mixture can be sprayed as long as adequate agitation is maintained.

If the mixtures are incompatible, the following methods may improve compatibility:

- Slurry the dry herbicide(s) in water before adding, or
- Add $\frac{1}{2}$ of the compatibility agent to the fertilizer, and the other $\frac{1}{2}$ to the emulsifiable concentrate or flowable herbicide before adding to the mixture.

If incompatibility is still observed, do not use the mixture.

APPLICATION TIMING

Sharda Metolachlor 86.4EC alone or in some tank mixtures with other labeled herbicides may be applied for weed control in certain crops at various times. Refer to the given crop section of the label to determine if application timings listed below are specified.

Pre-Plant Surface Applications

45 days before planting: For minimum-tillage or no-tillage systems only, apply **Sharda Metolachlor 86.4EC** alone, or with **Sharda Metolachlor 86.4EC** tank mixtures.

30-45 days before planting: Make split applications, with $\frac{2}{3}$ the specified broadcast rate for the crop and soil texture applied initially and the remaining $\frac{1}{3}$ at planting.

Less than 30 days before planting: Make split applications or a single application.

Refer to individual crop to determine if early pre-plant surface application instructions are provided. If weeds are present at the time of treatment, apply in a tank mixture combination with a contact herbicide (for example, Gramoxone Extra or Roundup). Observe directions for use, precautions, and restrictions on the label of the contact herbicide. To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

a. Pre-Plant Incorporated: Apply **Sharda Metolachlor 86.4EC** to the soil and incorporate into the top 2 inches of soil within 14 days before planting, using a finishing disk, harrow, rolling cultivator, or similar implement capable of providing uniform 2-inch incorporation. Use a pre-plant incorporated application if furrow irrigation is used or when a period of dry weather after application is expected. If crop will be planted on beds, apply and incorporate **Sharda Metolachlor 86.4EC** after bed formation, unless specified otherwise.

b. Pre-Emergence: Apply **Sharda Metolachlor 86.4EC** during planting (behind the planter) or after planting but before weeds or crops emerge.

SPECIAL APPLICATION PROCEDURES

Pre-Plant Incorporated: CA Only (Safflower, Pod Crops): Make broadcast applications of **Sharda Metolachlor 86.4EC** to the soil and thoroughly incorporate with a disk or similar implement set to till 4-6 inches deep. For more thorough incorporation, till the soil in 2 different directions (cross-till). Crops may be planted on flat surface or on beds. Exercise caution when forming the beds that only soil from the **Sharda Metolachlor 86.4EC** treated area is used. Do not bring untreated soil to the surface. If applying to pre-formed beds, incorporate **Sharda Metolachlor 86.4EC** with a tillage implement set to till 2-4 inches deep. Ensure that **Sharda Metolachlor 86.4EC** treated soil remains in the beds.

Pre-Emergence Applications (CA only): Apply **Sharda Metolachlor 86.4EC** after planting and water by sprinkler or flood irrigation within 7-10 days.

Fall Applications in the states of Iowa, Minnesota, North Dakota, South Dakota, Wisconsin, North of Route 20 in Nebraska, North of Route 136 in Illinois: Apply **Sharda Metolachlor 86.4EC** on medium- and fine-textured soils with more than 2.5% organic matter that will be planted to soybeans the following spring. The ground can be tilled before or after application. DO

NOT apply to frozen ground. DO NOT exceed 2-3-inch incorporation depth if soil is tilled after treatment. If a spring application is made, the total rate of the fall application and the spring application combined must not exceed the maximum total rate for the specific crop or illegal residues can result.

GROUND APPLICATION

Apply **Sharda Metolachlor 86.4EC** alone or in tank mixtures by ground equipment in a minimum of 10 gals. of spray mixture per acre unless otherwise specified.

Use sprayers that provide accurate and uniform application. For **Sharda Metolachlor 86.4EC** tank mixtures with wettable powder or dry flowable formulations, screens and strainers must not be finer than 50-mesh. Rinse sprayer thoroughly with clean water immediately after use.

Calculate the amount of herbicide needed for band treatment by the formula:

$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \text{broadcast rate per acre} = \text{amount needed per acre of field}$$

Low Carrier Volumes: Broadcast Ground Application Only

Use sprayers, such as Ag-Chem RoGator[®], Hagie, John Deere Hi-Cycle[™], Melroe Spra-Coupe, Tyler Patriot[™], or Willmar Air Ride[®], that provide accurate and uniform application. **Only water may be used as a carrier.** Screens in suction and in-line strainers must be 50-mesh. Manufacturers may require that tip screens as fine as 100-mesh be used with some nozzles. Use a pump with capacity to:

- maintain up to 35-40 psi at the nozzles.
- provide sufficient agitation in tank to keep mixture in suspension.

Use a minimum of 5 gals. of spray mixture per acre. Maximum sprayer speed is 15 mph. Rinse sprayer thoroughly with clean water immediately after each use.

Note: Use low pressure nozzles to reduce drift and increase application accuracy. Exercise care when using automatic rate controlling devices to spray the material within the rated working pressure and flow ranges of the nozzles selected. Use nozzle screens used when specified by the manufacturer. Place nozzles on 20-inch centers, except flooding types which must be placed on 40-inch centers. When Flat Fan-type nozzles are used, use those with angles of 80° or 110°. Always read and follow the manufacturer's directions for optimum setup and performance of their nozzles or tips.

AERIAL APPLICATION

Apply **Sharda Metolachlor 86.4EC** with properly calibrated aerial equipment in 5 or more gallons of spray mixture per acre. Do not apply under conditions where uniform coverage cannot be obtained, or when excessive spray drift may occur. To avoid injury to sensitive crops from drift, aerial applications must adhere to the following **AERIAL USE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS:**

- Nozzle height above the ground must be a maximum of 10 feet above the crop with low drift nozzles at a maximum pressure of 40 psi.
- Nozzles must be pointed toward the rear of the aircraft. The downward angle of the nozzle must not exceed 45 degrees.
- Nozzles and/or spray boom must not be located any closer to the end of the wing or rotor than ¾ the distance from the center of the aircraft.
- Use a maximum spray pressure of 40 psi.
- Establish a buffer zone between the area to be sprayed and sensitive crops.
- DO NOT spray when wind velocity is great than 5 mph.

The applicator is responsible for any loss or damage resulting from the application of **Sharda Metolachlor 86.4EC** in any manner not listed on this label. The applicator is responsible for following all state and local regulations and ordinances relative to spraying **Sharda Metolachlor 86.4EC**.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Ground Applications: Apply using a nozzle height no more than 4 feet above the ground or crop canopy.

Aerial Applications: Product efficacy is reduced if the distance of the outermost nozzles on the boom exceed ¾ the length of the wingspan or rotor. Nozzles must point backward parallel with the air stream and must not be pointed downward more than 45 degrees.

Where states have more stringent regulations, they must be observed.

The applicator must be familiar with and account for the information provided in the **SPRAY DRIFT MANAGEMENT** section of this label.

IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets greater than 150-200 microns. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **WIND, TEMPERATURE AND HUMIDITY, and TEMPERATURE INVERSION SECTIONS**).

CONTROLLING DROPLET SIZE

- **Volume** – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** – Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** – Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** – Orienting nozzles so that the spray is released backwards, parallel to the airstream will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.

BOOM LENGTH

For some use patterns, reducing the effective boom length to less than $\frac{3}{4}$ of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT

Do not make applications at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

WIND

Drift potential is lowest between wind speeds of 2 – 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS

Do not apply during a temperature inversion, because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small-suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

SENSITIVE AREAS

Sharda Metolachlor 86.4EC must only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas). Do not apply near humans or animals. Flagmen and loaders must avoid inhalation of spray mist and prolonged contact with skin.

APPLICATION WITH IMPREGNATED DRY BULK GRANULAR FERTILIZERS

Sharda Metolachlor 86.4EC may be impregnated or coated on many dry bulk granular fertilizers and applied with the fertilizers to control weeds. Follow all directions for use restrictions and precautions on the **Sharda Metolachlor 86.4EC** label regarding target crops, rates per acre, soil texture, application methods, and rotational crops.

It is the responsibility of the individual and/or company selling the herbicide/fertilizer mixture to comply with all individual state regulations relating to dry bulk granular fertilizer blending, registration, labeling, and application.

Prepare the herbicide/fertilizer mixture by using any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Space nozzles used to spray **Sharda Metolachlor 86.4EC** onto the fertilizer to provide uniform spray coverage. Aim the spray onto the fertilizer only, avoiding the walls of the blender.

If the herbicide/fertilizer mixture is too wet, add a highly absorptive material, such as Agsorb® FG or Celatom MP-79®, or similar granular clay or diatomaceous earth materials, to obtain a dry, free-flowing mixture. Add absorptive materials only after the herbicide has been thoroughly blended into the fertilizer mixture. Best application results are obtained when a granule of 6/30 particle size or of a size similar to that of the fertilizer materials is used. Use less than 2% by weight of absorptive material. Do not use more than 5% absorptive material by weight.

Calculate the amount of **Sharda Metolachlor 86.4EC** to be used per ton of fertilizer by using the following formula:

$2,000 / \text{pounds of fertilizer desired per acre} \times \text{number of pints } \mathbf{Sharda\ Metolachlor\ 86.4EC} \text{ required per acre} = \text{pints of } \mathbf{Sharda\ Metolachlor\ 86.4EC} \text{ per ton of fertilizer.}$

Application by Pneumatic (Compressed Air) Equipment: High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer can cause fertilizer mixtures to build up and/or plug the distributor head, air tubes, or nozzle deflector plates. To minimize buildup, premix 2.0-2.5 pints/gallon **Sharda Metolachlor 86.4EC** and ExxonMobil™ Aromatic 200. Aromatic 200 is a noncombustible, nonflammable petroleum product that can be used in either a fertilizer blender or through direct injection systems. Do not use drying agents when using Aromatic 200.

If impregnating **Sharda Metolachlor 86.4EC** in a blender before application, substitute a drying agent for Aromatic 200 for a drier mixture. Add Agsorb® FG or another drying agent of 6/30 particle size. Do **not** use drying agents with On-The-Go impregnation equipment.

Precautions: Use mixtures of **Sharda Metolachlor 86.4EC** and Aromatic 200 on dry fertilizer only. Poor results or crop injury can occur if these mixtures are used in water or liquid fertilizer solutions for spraying applications.

Restrictions:

To avoid potential for explosion:

- DO NOT impregnate **Sharda Metolachlor 86.4EC** on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers.
- DO NOT combine **Sharda Metolachlor 86.4EC** with a single superphosphate (1-20-0) or treble superphosphate (0-46-0).
- DO NOT use **Sharda Metolachlor 86.4EC** on straight limestone as absorption will not occur.
- Fertilizer blends containing limestone can be impregnated.

Application of Impregnated Dry Bulk Granular Fertilizer

Apply 200 to 700 pounds of the herbicide/fertilizer mixture per acre. Apply the mixture uniformly to the soil with properly calibrated equipment immediately after blending. Uniform application of the herbicide/fertilizer mixture is essential in order to prevent possible crop injury to subsequent rotational crops. Non-uniform application results in unsatisfactory weed control. In areas where conventional tillage is practiced, incorporate the mixture shallowly into the soil. On fine- or medium-textured soils in areas where soil incorporation is not planned, i.e., reduced-tillage situations or in some conventional till situations, apply **Sharda Metolachlor 86.4EC** approximately 30 days before planting to allow moisture to move the herbicide/fertilizer mixture into the soil. On coarse-textured soils, apply **Sharda Metolachlor 86.4EC** approximately 14 days prior to planting.

Application Precaution: Apply **Sharda Metolachlor 86.4EC** as early as possible to avoid rotational crop injury, since **Sharda Metolachlor 86.4EC** impregnated onto dry bulk fertilizers lasts longer in the soil than if it is applied as a spray in water or fluid fertilizer.

CHEMIGATION - CENTER PIVOT IRRIGATION

Sharda Metolachlor 86.4EC alone or in tank mixture with other herbicides on this label that are registered for center pivot application can be applied in irrigation water pre-emergence (after planting but before weeds or crop emerge) at specified rates listed on this label. Apply this product only through a center pivot irrigation system.

Do not apply this product through any other type of irrigation system.

Crop injury, reduced efficacy, and/or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, contact State Extension specialists, equipment manufacturers, or other experts. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Restriction: Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

Operating Instructions

1. The system must contain a functional check-valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from back flow.

2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump or piston pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.
8. Prepare a mixture with a minimum of 1 part of water to 1 part herbicide(s) and inject this mixture into the center pivot system. Injecting a larger volume of a more dilute mixture per hour will usually provide more accurate calibration of metering equipment. Maintain sufficient agitation to keep the herbicide in suspension.
9. Meter into irrigation water during entire period of water application.
10. Apply in ½-1 inch of water. Use the lower water volume (½ inch) on coarse-textured soils and the higher volume (1 inch) on fine-textured soils. More than 1 inch of water at application may reduce weed control by moving the herbicide below the effective zone in the soil.

Precaution For Center Pivot Applications: Where sprinkler distribution patterns do not overlap sufficiently, unacceptable weed control can occur. Where sprinkler distribution patterns overlap excessively, crop injury can occur.

Note: For information on applying in lower volumes of carrier, see **Low Carrier Application** section of this label.

CLEANING INSTRUCTIONS

- Do not use the same sprayer without thoroughly cleaning on sensitive crops; minute residues of **Sharda Metolachlor 86.4EC** in the tank can injure crops.
- Wash sprayer and spray equipment thoroughly with clean water immediately after use.
- Drain any remaining spray solution of **Sharda Metolachlor 86.4EC** from the spray tank and dispose of according to label disposal instructions.
- Rinse the spray tank and refill with water, adding 1 cup heavy-duty detergent per 20 gallons of water.
- Recycle this mixture through the equipment for 5 minutes, and spray out.
- Clean pump and nozzle screens thoroughly.
- Wash away any spray mixture from the outside of spray tank, nozzles or spray rig.
- Dispose of all rinse water in compliance with local, state, and Federal guidelines.

USE PRECAUTIONS

Where directions specify a **Sharda Metolachlor 86.4EC** tank mixture with AAtrex formulations, other brands of atrazine may be used. Follow the rates, instructions, and limitations on the AAtrex or respective atrazine product label if other brands of atrazine are used. Injury may occur following the use of **Sharda Metolachlor 86.4EC** under abnormally high soil moisture conditions during early development of the crop.

USE RESTRICTIONS

- Do not use in nurseries, turf, or landscape plantings.
- Do not apply under conditions which favor runoff or wind erosion of soil containing this product to non-target areas.
- Do not apply to impervious substrates such as paved or highly compacted surfaces.
- Do not use tail-water from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least ½ inch of rainfall has occurred between application and the first irrigation.
- If **Sharda Metolachlor 86.4EC** is incorporated, any supplemental tillage before planting must not exceed the depth of incorporation.

Note: Certain states may have established rate limitations for atrazine within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

Dry weather following pre-emergence application of **Sharda Metolachlor 86.4EC** or a tank mixture can reduce product efficacy.

Cultivate if weeds develop. Where reference is made to weeds partially controlled, partial control can either mean erratic control from good to poor or consistent control at a level below that generally considered acceptable for commercial weed control.

Sharda Metolachlor 86.4EC applied alone controls or partially controls the following weeds:

Barnyardgrass (watergrass)	Foxtail millet	Shattercane]
Bristly foxtail	Galinsoga	Signalgrass (<i>Brachiaria</i>)
Carpetweed	Giant foxtail	Southwestern cupgrass
Common purslane]	Goosegrass	Tall waterhemp
Common waterhemp	Green foxtail	Texas panicum]
Crabgrass	Hairy nightshade	Volunteer sorghum]
Crowfootgrass	Pigweed	Wild proso millet
Eastern black nightshade	Prairie cupgrass	Witchgrass
Eclipta]	Red rice	Woolly cupgrass
Fall panicum	Robust foxtails (purple, white)	Yellow foxtail
Florida beggarweed]	Sandbur]	Yellow nutsedge
Florida pusley	Seedling johnsongrass]	

] Partial control. Refer to the **PRODUCT INFORMATION** section. Weed control is erratic due partially to variable weather conditions.

**** Florida Beggarweed:** Apply a minimum of 2 pints/acre pre-emergence for partial control.

Texas Panicum: Apply a minimum of 2 pints/acre using a center pivot irrigation system.

To improve weed control:

1. Till moist soil thoroughly to destroy germinating and emerged weeds. If **Sharda Metolachlor 86.4EC** is applied pre-plant incorporated, tillage may be used to incorporate **Sharda Metolachlor 86.4EC** if uniform 2-inch incorporation is achieved as specified in **Application Procedures**.
2. Plant crop into moist soil immediately after tillage. If **Sharda Metolachlor 86.4EC** is to be used pre-emergence, apply at planting or immediately after planting.
3. Irrigate ½ - 1 inch of water with a sprinkler system, if available, within 2 days of application. Irrigate with ½ inch water volume on coarse-textured soils, and 1 inch on fine-textured soils. Refer to the section on **Center Pivot Irrigation Application** for instructions with this application method.
4. If irrigation is impossible and rain does not occur within 2 days after planting and application, weed control may be decreased. Under these conditions, perform a shallow cultivation as soon as weeds emerge.

Rotational Crops:

Sharda Metolachlor 86.4EC Alone:

(1) If a crop treated with **Sharda Metolachlor 86.4EC** alone is lost, any crop on this label may be replanted immediately. Do not make a second broadcast application of **Sharda Metolachlor 86.4EC**. If the original application was banded and the second crop is planted in the untreated row middles, make a second banded treatment.

Crop	Rotation Interval (months)
Alfalfa	4 months
Barley, oats, rye, wheat	4 ½ months
Clover	9 months
Tomatoes	6 months
All other crops	12 months

(2) Any crop on this label, in addition to root crops, tobacco, barley, buckwheat, milo, oats, rice, rye, wheat, cabbage, or peppers, may be planted in the spring following treatment.

(3) Following a lay-by treatment or multiple treatments applied the previous season, any crop on this label, in addition to tobacco, cabbage, or peppers, may be planted in the spring.

Restrictions:

- Do not make a second broadcast application of **Sharda Metolachlor 86.4EC**.
- Do not graze or feed forage or fodder from cotton to livestock.

Sharda Metolachlor 86.4EC Tank Mixtures: For **Rotational Crops** restrictions for **Sharda Metolachlor 86.4EC** used in tank mixtures, refer to the statements/restrictions above for **Sharda Metolachlor 86.4EC** and to the respective product labels of any mixing partner(s) for additional statements/restrictions.

CROPS

COTTON

Sharda Metolachlor 86.4EC ALONE

Application: Apply **Sharda Metolachlor 86.4EC** pre-emergence only in AR, LA, MS, TN, and Bootheel of MO.

Sandy loam: Apply 0.75-1.0 pt./A.

Medium & Fine soils: Apply 1.0-1.33 pts./A.

Apply **Sharda Metolachlor 86.4EC** pre-plant incorporated or pre-emergence in NM, OK, and TX.

Sandy loam: Apply 1.0 pt./A.

Medium soils: 1.0-1.33 pts./A.

Fine soils: 1.33 pts./A.

Apply 0.75-1.33 pts./A **Sharda Metolachlor 86.4EC** post-emergence to cotton and pre-emergence to weeds according to the state rate limitations in the **Post-Emergence** section.

Restriction: Do not use on sand and loamy sand.

Pre-Plant Incorporated (NM, OK, and TX Only):

Apply to the soil and incorporate into the top inch of soil immediately before planting, at planting, or after planting but before crop or weeds emerge. Use a rolling cultivator or similar implement to uniformly incorporate not more than 1 inch deep. Use a pre-plant incorporated application if furrow irrigation is used or when a period of dry weather after application is expected. Wet the top of the bed where furrow irrigation is used. If the crop is to be planted on beds, apply and incorporate after bed formation. Plant cotton below the zone of incorporation; i.e., at least 1 inch on fine soils and 1.5 inches on coarse and medium soils. If incorporated prior to planting, use a planter that will result in a minimum of soil disturbance.

Note: For optimal control of yellow nutsedge and suppression of seedling johnsongrass, apply **Sharda Metolachlor 86.4EC**. Pre-plant incorporated at the maximum rate within the specified rate range for the soil texture, whether applied alone or mixed with Caparol 4L.

Pre-Emergence: Apply to the soil surface at planting or after planting but before weeds or crop emerge.

Post-Emergence: Apply **Sharda Metolachlor 86.4EC** broadcast over-the-top or directed to the soil surface, according to the rate and cotton height limitations listed below by state. Application before weeds emerge or after clean cultivation to remove existing weeds is necessary since **Sharda Metolachlor 86.4EC** will not control emerged weeds. **Sharda Metolachlor 86.4EC** post-emergence may be applied over any previous registered herbicide treatment. In sprinkler-irrigated areas, sprinkler-irrigate after application with ½-1 inch of water (½ inch on coarse-textured soils to 1 inch on fine-textured soils) to incorporate **Sharda Metolachlor 86.4EC**. In furrow-irrigated areas, apply **Sharda Metolachlor 86.4EC**, incorporate with a rolling cultivator or similar implement that provides uniform shallow incorporation (2 inches or less), and then irrigate. In non-irrigated areas, if at least ½ inch of rainfall does not occur within 10 days after application, cultivate with a rolling cultivator or similar implement that provides uniform shallow incorporation of **Sharda Metolachlor 86.4EC**.

State Specific Restrictions:

VA, NC, SC, GA, FL, and AL: Apply 1.0-1.33 pts./A **Sharda Metolachlor 86.4EC** when cotton is 3-6" tall.

TN, AR, MS, MO, and LA: Apply 0.75-1.33 pts./A **Sharda Metolachlor 86.4EC** when cotton is 3-12" tall.

TX, OK, NM, AZ, CA, and Clay Soils in AR: Apply 1.0-1.33 pts./A **Sharda Metolachlor 86.4EC** when cotton is 3-12" tall but before August 1st.

Multiple Applications:

If weed pressure is heavy, difficult to control species are present and/or expected, or reinfestation occurs, and a weed control program is used, multiple applications of **Sharda Metolachlor 86.4EC** are effective when used as part of the weed control program. Apply as a pre-plant incorporated or pre-emergence treatment and follow with an application post-emergence to cotton before weeds emerge or after clean cultivation to remove existing weeds, since **Sharda Metolachlor 86.4EC** will not control emerged weeds. Cotton must be at least 3" tall at the post-emergence timing. Apply **Sharda Metolachlor 86.4EC** post-emergence over a previous pre-plant or pre-emergence **Sharda Metolachlor 86.4EC** application as shown in the following table.

State	Multiple Sharda Metolachlor 86.4EC Applications to Cotton		
	Pre-Plant Incorporated or Pre-Emergence Pts./A	Post-Emergence and Height Pts./A	
MS, LA, TN, AR, MO	0.75 – 1.33 (Pre-Emergence only)	+	
TX, OK, NM	1.0 – 1.33		
NC & VA	1.0 – 1.33 (Pre-Emergence only)		
			0.75 – 1.33 to 3-12" Cotton
			1.0 – 1.33 to 3-12" Cotton before Aug. 1 st
			1.0 – 1.33 to 3-12" Cotton

In sprinkler-irrigated areas, sprinkler irrigate after application with ½ -1" of water (½" on coarse textured soils to 1" on fine-textured soils) to incorporate **Sharda Metolachlor 86.4EC**. In furrow-irrigated areas, apply **Sharda Metolachlor 86.4EC**, incorporate with a rolling cultivator or similar implement that provides uniform shallow incorporation (2" or less), and then irrigate. In non-irrigated areas, if at least ½" rainfall does not occur within 10 days after application, cultivate with a rolling cultivator or similar implement that provides uniform shallow incorporation of **Sharda Metolachlor 86.4EC**.

Note: For best control of yellow nutsedge and suppression of seedling johnsongrass, apply **Sharda Metolachlor 86.4EC** pre-plant incorporated, pre-emergence, or post-emergence to cotton and pre-emergence to weeds at the maximum rate within the specified rate range for the soil texture, whether applied alone or in combinations. Do not apply more than a total of 2.0 pts./A on coarse soils

or 4 pts./A of **Sharda Metolachlor 86.4EC** on medium and fine soils during a growing season. These treatments may be applied over previous registered herbicide treatments.

Restrictions:

- Do not apply **Sharda Metolachlor 86.4EC** on sand or loamy sand soils, or in areas where water is likely to “pond” over the bed.
- Do not make broadcast applications of **Sharda Metolachlor 86.4EC** to cotton planted in furrows more than 2 inches deep. Make band applications to cotton planted in furrows deeper than 2 inches, but band width must not exceed the width of the bottom of the furrow.
- Do not apply **Sharda Metolachlor 86.4EC** post-emergence until after first “knifing” or cultivation to level soil surface.
- Do not apply over-the-top in fluid fertilizer or any other adjuvant, surfactant, oil, or other pesticide not listed in the cotton section of this label.
- Do not graze or feed forage or fodder from cotton to livestock.
- Do not apply on Taloka silt loam.
- Do not use in Gaines County, TX.

Sharda Metolachlor 86.4EC COMBINATIONS

It is the pesticide user’s responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank Mixture with Caparol 4L

Apply **Sharda Metolachlor 86.4EC** tank mixtures with Caparol 4L pre-plant incorporated or pre-emergence in water or fluid fertilizer. When fluid fertilizer is used as a carrier for **Sharda Metolachlor 86.4EC**, either alone or in combination with Caparol 4L, mix only the amount that will be sprayed in one operation. Do not allow mixtures to stand without agitation. Only water may be used as a carrier for post-emergence directed application.

In addition to those weeds controlled by **Sharda Metolachlor 86.4EC** alone, **Sharda Metolachlor 86.4EC + Caparol 4L**, applied pre-plant incorporated or pre-emergence, controls the following weeds:

Annual morningglory	Junglerice	Mustard	Ragweed
Groundcherry	Lambsquarters	Prickly sida (teaweed)	Shallow-germinating seeds of cocklebur & coffeeweed
Hairy night shade	Malva	Purslane	Wild oats

As a post-emergence directed application, Caparol provides post-emergence control and residual control of weeds on its label, while **Sharda Metolachlor 86.4EC** provides residual control of weed species on its label. **Sharda Metolachlor 86.4EC** will not control emerged weeds.

Pre-Plant Incorporated or Pre-Emergence:

Apply **Sharda Metolachlor 86.4EC + Caparol 4L**, either pre-plant incorporated or pre-emergence, using the appropriate rate from the **Sharda Metolachlor 86.4EC + Caparol 4L – Cotton (NM, OK, TX)** table. Plant cotton below the zone of incorporation; i.e., at least 1” on fine soils and 1½” on coarse and medium soils. If incorporated before planting, use a planter that will result in a minimum soil disturbance.

Sharda Metolachlor 86.4EC + Caparol 4L – Cotton (NM, OK, TX)

Do not use on sand, loamy sand soils.

USE AREAS	SOIL TEXTURE	BROADCAST RATES PER ACRE	
		Sharda Metolachlor 86.4EC	Caparol 4L
OK, and Blacklands and Gulf Coast of TX	Loams	0.85 - 1.33 pts.	2.4 pts.
	Clays	1.33 pts.	4.8 pts.
Rio Grande Valley of TX	Loams	0.85 - 1.33 pts.	3.2 pts.
	Clays	1.33 pts.	4.8 pts.
NM; High Plains, Rolling Plains, Edwards Plateau of TX; and Southwest TX	Sandy loam	0.85 - 1.0 pt.	1.6 pts.
	Loams	0.85 - 1.33 pts.	2.4 pts.
	Sandy clay loam	1.33 pts.	2.4 pts.
	Other clay soils	1.33 pts.	3.2 pts.

Post-Emergence-Directed (AR, AZ, CA, LA, MS, NM, OK, TN, TX, and MO): Tank mix **Sharda Metolachlor 86.4EC** with Caparol 4L in water and apply post-emergence in cotton to control emerged weeds listed on the Caparol 4L label and residual pre-emergence control of weeds controlled by **Sharda Metolachlor 86.4EC** and Caparol 4L or apply after cultivation for residual pre-emergence control. These treatments may be applied over previous registered treatments, including **Sharda Metolachlor 86.4EC**; however, the maximum label rate of any product must not be exceeded. **Do not apply over-the-top of cotton.**

Apply **Sharda Metolachlor 86.4EC + Caparol 4L** in a minimum of 20 gals. of spray volume per acre. Follow the directions, limitations, restrictions and precautions on the Caparol 4L label when Caparol is applied as a post-emergence directed application. Refer to the directions, limitations, and precautions for use of **Sharda Metolachlor 86.4EC** under the **Cotton-Sharda Metolachlor 86.4EC Alone-Post-Emergence** section.

Restrictions:

- Do not make broadcast applications of **Sharda Metolachlor 86.4EC** + Caparol 4L to cotton planted in furrows deeper than 2". Make band applications to cotton planted in furrows deeper than 2", but band width must not exceed the width of the bottom of the furrow.
- Do not apply on sand or loamy sand soils, or in areas where water is likely to "pond" over the bed.
- Do not graze or feed forage or fodder from cotton to livestock.
- Do not apply to glandless cotton varieties.
- Do not apply on Taloka silt loam.
- Do not use in Gaines County, TX.
- Do not apply in cut areas of newly leveled fields, or in areas of excess salt.
- Refer to the Caparol 4L label for further instructions and limitations.

Tank Mixture with Cotoran DF

Tank mix **Sharda Metolachlor 86.4EC** + Cotoran DF pre-emergence to control weeds controlled by **Sharda Metolachlor 86.4EC** alone, and those as listed on the Cotoran DF label. This combination controls spotted spurge, hyssop spurge, nodding spurge, and prostrate spurge. Apply to the soil surface at planting or after planting but before weeds or crop emerge, using the appropriate rates from the **Sharda Metolachlor 86.4EC + Cotoran DF-Cotton** table. Apply the tank mixture post-emergence to cotton but pre-emergence to weeds, or apply post-emergence to both cotton and broadleaf weeds for control of weeds on the Cotoran label. Apply as a directed, semi-directed, or over-the-top spray. **Sharda Metolachlor 86.4EC** will not control emerged weeds but will provide pre-emergence control of species on its label.

Mixing Instructions: Incompatibility can occur when tank mixing **Sharda Metolachlor 86.4EC** with Cotoran DF. To avoid incompatibility:

- Fill the spray tank ¼ full with water or fluid fertilizer and start agitation.
- Add Cotoran DF and allow it to become dispersed.
- Add X-77 at 0.5% volume/volume final spray (4 pts./100 gals.).
- Add **Sharda Metolachlor 86.4EC**.
- Add the rest of the water or fluid fertilizer.
- Agitate during mixing and application to maintain a uniform suspension.

Restriction:

- Do not use fluid fertilizer as a carrier for post-emergence applications.

Sharda Metolachlor 86.4EC + Cotoran DF-Cotton

Do not use on sand, loamy sand soils.

USE AREAS	SOIL TEXTURE	BROADCAST RATES PER ACRE	
		SHARDA METOLACHLOR 86.4EC	COTORAN DF*
AR, LA, MS, Bootheel of MO & TN	Sandy loam	0.75 - 1.0 pts.	1.2 lbs.
	Loam, silt, silt loam	1.0 - 1.33 pts.	1.2 - 1.9 lbs.
	Fine	1.0 - 1.33 pts.	1.9 - 2.4 lbs.
Eastern OK, Gulf Coast, Rio Grand Valley & Eastern TX	Sandy loam	0.85 - 1.0 pts.	1.2 lbs.
	Loam, silt, silt loam	1.0 - 1.33 pts.	1.2 - 1.9 lbs.
	Fine	1.33 pts.	1.9 - 2.4 lbs.

*When using Cotoran 4L, use equivalent rates. Multiply lbs. of Cotoran DF by 1.7 to get pts. of Cotoran 4L.

Post-Emergence: Apply this tank mixture post-emergence to cotton but pre-emergence to weeds or post-emergence to both cotton and weeds for control of weeds on the Cotoran label. Apply as a directed, semi-directed, or over-the-top spray. **Sharda Metolachlor 86.4EC** will not control emerged weeds but will provide pre-emergence control of species on its label. Apply when cotton is in the 3-12" stage. Where rate ranges are given for Cotoran DF, use the higher rate within the specified rate range when applying post-emergence to weeds that are 2" or less. These treatments may be applied over previous registered treatments, including **Sharda Metolachlor 86.4EC**, provided the maximum label rate of any product is not exceeded.

Restrictions:

- Do not apply **Sharda Metolachlor 86.4EC** + Cotoran on sand or loamy sand soils, or in areas where water is likely to "pond" over the bed.
- Do not make broadcast applications of **Sharda Metolachlor 86.4EC** + Cotoran to cotton planted in furrows more than 2" deep. Band applications may be made to cotton planted in furrows deeper than 2 inches, but band width must not exceed the width of the bottom of the furrow.
- Do not use on Taloka silt loam.
- Do not feed treated forage or gin trash to livestock or graze treated areas.
- Do not use in Gaines County, TX.

Refer to the Cotoran labels for further instructions, restrictions, precautions, and limitations.

Tank Mixture of Sharda Metolachlor 86.4EC or Sharda Metolachlor 86.4EC + Cotoran with Gramoxone Extra or Roundup for Minimum-Tillage or No-Tillage Systems

In minimum-tillage or no-tillage systems where cotton is planted directly into a cover crop, stale seedbed, or previous crop residues, the contact herbicides Gramoxone Extra or Roundup may be added to a tank mix of either **Sharda Metolachlor 86.4EC** or **Sharda Metolachlor 86.4EC + Cotoran**. When used as directed, the Gramoxone Extra portion of the tank mixture controls most emerged weeds and suppresses many perennial weeds. Roundup combinations will control emerged annual and perennial weeds when applied as directed on the Roundup label. The **Sharda Metolachlor 86.4EC** and **Sharda Metolachlor 86.4EC + Cotoran** portion of the tank mixture provides pre-emergence control of the weeds listed on this label in the **Sharda Metolachlor 86.4EC** and **Sharda Metolachlor 86.4EC + Cotoran** sections, respectively.

Refer to the label of each product used in combination and observe the planting details, information regarding application, geographical restrictions, and all other precautions and limitations. Refer to **Mixing Instructions** under the **Tank Mixture with Cotoran DF** section.

Application Instructions:

Apply before, during, or after planting, but before the cotton emerges. Apply 0.85-1.0 pts./A **Sharda Metolachlor 86.4EC** on sandy loams, medium-, and fine-textured soils. Refer to the **Sharda Metolachlor 86.4EC + Cotoran DF-Cotton** table for the Cotoran DF rates.

Add Gramoxone Extra or Roundup at the following broadcast rates:

Gramoxone Extra: 1.5-2.0, 2.0-2.5, or 2.5-3.0 pts./A to 1-3", 3-6", or 6" tall weeds, respectively.

Apply surfactant at 1 or 2 pts./100 gals. of spray mixture with 75% or greater or 50-74% nonionic active ingredient, respectively. This treatment will not control weeds taller than 6".

Restriction:

- Do not apply combinations containing Gramoxone Extra in suspension-type liquid fertilizers as the activity of paraquat will be reduced.

Roundup: See the Roundup label for weeds controlled, rates, and other use directions.

Heavy rains soon after application can result in crop injury, especially in poorly drained areas, where water stands for several days, or where the seeding slit has not been properly closed.

Restrictions:

- Do not apply **Sharda Metolachlor 86.4EC + Cotoran 4L + Roundup** in tank mixture because of compatibility problems.
- Do not use in Gaines County, TX.

Refer to the Cotoran labels and the **Tank Mixture with Cotoran DF** section of this label for further instructions, restrictions precautions, and limitations.

Apply in 20-60 gals. of water or fluid fertilizer per acre with ground equipment.

Tank Mixture with MSMA, MSMA + Caparol, or MSMA + Cotoran

Tank mix **Sharda Metolachlor 86.4EC** with MSMA in water and apply post-emergence control of emerged weeds listed on the MSMA product label and residual pre-emergence control of weeds controlled by **Sharda Metolachlor 86.4EC**. The addition of Caparol or Cotoran will add control of weed species on their respective labels.

Post-Emergence-Directed (AR, AZ, CA, LA, MS, NM, OK, TN, TX, and Bootheel of MO): Apply **Sharda Metolachlor 86.4EC + MSMA** post-emergence-directed to 3-12" cotton according to the directions, limitations, and precautions on the MSMA product label, as well as the directions, limitations, and precautions for use of **Sharda Metolachlor 86.4EC** in the section for **Cotton-Sharda Metolachlor 86.4EC Alone-Post-emergence**. These treatments can be applied over previous registered treatments, including **Sharda Metolachlor 86.4EC**; however, the maximum label rate of any product must not be exceeded. Cotoran or Caparol may be added to the **Sharda Metolachlor 86.4EC + MSMA** tank mixture according to the respective label directions for application to 3-12" cotton. When these mixtures are used, follow the mixing instructions for **Sharda Metolachlor 86.4EC + Caparol** or **Cotoran** and then add the MSMA product.

Restrictions:

- Do not use **Sharda Metolachlor 86.4EC** in tank mix with premixes of MSMA plus herbicides other than those registered for use in tank mixture with **Sharda Metolachlor 86.4EC** on cotton.
- Do not apply after first cotton bloom.

PEANUTS

Sharda Metolachlor 86.4EC ALONE

Apply **Sharda Metolachlor 86.4EC** pre-plant incorporated, post-plant incorporated, pre-emergence, or lay-by using the rates specified below.

Pre-Plant Incorporated or Pre-Emergence: Follow instructions for use of **Sharda Metolachlor 86.4EC** alone under **Application Instructions**.

Post-Plant Incorporated: Apply and shallowly incorporate **Sharda Metolachlor 86.4EC** into the soil after planting but before peanut germination. Keep incorporation depth and incorporating implements above the seed or seed will be damaged.

Lay-by: Apply **Sharda Metolachlor 86.4EC** to the soil immediately after the last normal cultivation.

Apply **Sharda Metolachlor 86.4EC** alone, pre-plant incorporated, post-plant incorporated, pre-emergence, or lay-by at a broadcast rate of 1.0-1.33 pts./A in the Southeast and 0.85-1.33 pts./A in NM, OK, and TX.

Florida beggarweed in the Southeast (Partial control): Apply 1.33-2.0 pts./A pre-emergence.

Note: **Sharda Metolachlor 86.4EC** alone can be applied as directed after any of the following preplant incorporated herbicides when used according to label instructions:

Balan: 3-4 qts./A	Treflan EC: 1 pt./A	Vernam®: 2.33-3 pts./A
Sonalan: 1.25-3 pts./A	Pursuit: 0.25 pt./A	Prowl: 1-2 pts./A

Restrictions:

- Do not graze or feed peanut forage or fodder to livestock for 30 days following application.
- Do not apply within 90 days of harvest.

Sharda Metolachlor 86.4EC COMBINATIONS

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank Mixture with Balan L.C.

Sharda Metolachlor 86.4EC + Balan tank mixture applied pre-plant incorporated controls those weeds listed under **Sharda Metolachlor 86.4EC Applied Alone** and those weeds as listed on the Balan label.

Apply 1.0-1.33 pts./A of **Sharda Metolachlor 86.4EC** + 3-4 qts./A of Balan in a minimum of 10 gals. of spray volume per acre for ground application or in a minimum of 5.0 gals. of spray volume per acre for aerial application. Follow the procedures for Balan on the Balan label for soil preparation and incorporation of this tank mix. Apply and incorporate **Sharda Metolachlor 86.4EC** + Balan up to 14 days prior to planting.

Note: Follow all restrictions and precautions on the Balan label.

Multiple Applications

Where weed pressure is heavy or where species difficult to control are expected, **Sharda Metolachlor 86.4EC** is most effective when used as follows:

Southeast Only (AL, FL, GA, NC, SC, VA)

1st Application: Apply **Sharda Metolachlor 86.4EC** pre-plant incorporated as directed under **Peanuts-Sharda Metolachlor 86.4EC Alone** or apply **Sharda Metolachlor 86.4EC** + Balan pre-plant incorporated as directed previously in this section. Refer to the respective section for weeds controlled.

2nd Application: Apply 1.0-2.0 pts./A **Sharda Metolachlor 86.4EC** any time from pre-emergence up to "ground cracking" for extended control of weeds not yet emerged. Refer to the **Sharda Metolachlor 86.4EC Applied Alone** section for a list of weeds controlled.

3rd Application: Apply **Sharda Metolachlor 86.4EC** at lay-by as directed under **Peanuts-Sharda Metolachlor 86.4EC Alone**. Use only when late germinating weeds are expected to be a problem. Refer to the **Sharda Metolachlor 86.4EC Applied Alone** section for a list of weeds controlled.

Restrictions:

- Do not graze or feed peanut forage or fodder to livestock for 30 days following application.
- Do not apply within 90 days of harvest.
- Do not apply more than the equivalent of 2.66 pts. of **Sharda Metolachlor 86.4EC** per acre during any one year.

Southwest Only (NM, OK, TX)

1st Application: Apply **Sharda Metolachlor 86.4EC** pre-plant incorporated or pre-emergence or at-cracking as directed previously in this section. Refer to the respective section for weeds controlled.

2nd Application: Apply **Sharda Metolachlor 86.4EC** at lay-by as directed under **Peanuts-Sharda Metolachlor 86.4EC Alone** on this label. Use only when late germinating weeds are expected to be a problem. Refer to the **Sharda Metolachlor 86.4EC Applied Alone** section for a list of weeds controlled.

Restrictions:

- Do not graze or feed peanut forage or fodder to livestock for 30 days following application.
- Do not apply within 90 days of harvest.
- Do not apply more than the equivalent of 2.67 pts. of **Sharda Metolachlor 86.4EC** per acre during any one year.
- Do not use **Sharda Metolachlor 86.4EC** after peanuts have emerged.

Tank Mixture or Sequentially with Pursuit

The tank mixture or sequential treatment of **Sharda Metolachlor 86.4EC** and Pursuit controls all weeds controlled by **Sharda Metolachlor 86.4EC** alone and by Pursuit alone. Refer to the **Sharda Metolachlor 86.4EC Applied Alone** section for weeds controlled by **Sharda Metolachlor 86.4EC** and to the Pursuit label for weeds controlled by Pursuit. Refer to the respective labels for application methods, timing, rates, restrictions, and precautions; and use in accordance with the more restrictive label. **Sharda Metolachlor 86.4EC** will not control emerged weeds.

Restriction:

- Do not exceed the maximum specified label rate of either product.

Tank Mixture with Sonalan

The tank mixture controls all weeds controlled by **Sharda Metolachlor 86.4EC** alone and by Sonalan alone. Refer to the **Sharda Metolachlor 86.4EC Applied Alone** section for weeds controlled by **Sharda Metolachlor 86.4EC** and to the Sonalan label for weeds controlled by Sonalan. Apply **Sharda Metolachlor 86.4EC** + Sonalan pre-plant incorporated, using the appropriate rate from the **Sharda Metolachlor 86.4EC + Sonalan-Peanuts Sharda Metolachlor 86.4EC + Sonalan-Peanuts** table. Follow soil preparation procedures for Sonalan. Refer to the Peanut Sonalan/**Sharda Metolachlor 86.4EC** Tank Mixture label for incorporation specifications.

Sharda Metolachlor 86.4EC + Sonalan-Peanuts

USE AREAS	SOIL TEXTURE	BROADCAST RATES PER ACRE	
		SHARDA METOLACHLOR 86.4EC	SONALAN
Southeast	Coarse Medium Fine	1.0 - 1.33 pts.	1.25 - 2.0 pts. 1.75 - 2.50 pts. 2.25 - 3.0 pts.
NM, OK, TX	Coarse Medium Fine	0.85 - 1.33 pts.	1.25 - 2.0 pts. 1.75 - 2.50 pts. 2.25 - 3.0 pts.

Follow all use directions, limitations, restrictions, precautions, and instructions regarding application to peanuts on the **Sharda Metolachlor 86.4EC** and Sonalan labels.

Tank Mixture with Prowl

Sharda Metolachlor 86.4EC + Prowl applied pre-plant incorporated controls all weeds controlled by **Sharda Metolachlor 86.4EC** alone plus Texas panicum, field sandbur, johnsongrass from seed, lambsquarters, kochia, annual spurge, and other species on the Prowl label. Apply **Sharda Metolachlor 86.4EC** + Prowl by ground or by aerial equipment within 14 days before planting. Incorporate into the top 1-2" of soil before planting and within 7 days of application, using a finishing disk or similar implement capable of providing uniform incorporation. If peanuts will be planted on beds, apply and incorporate after bed formation. Refer to the **Incorporation** instructions of the respective labels for additional directions.

Apply **Sharda Metolachlor 86.4EC** + Prowl pre-plant incorporated using the appropriate rates from the **Sharda Metolachlor 86.4EC + Prowl-Peanuts** table.

Sharda Metolachlor 86.4EC + Prowl-Peanuts

USE AREAS	SOIL TEXTURE	BROADCAST RATES PER ACRE	
		SHARDA METOLACHLOR 86.4EC + PROWL	
NM, OK, TX	Sandy, loamy sand Sandy loam Fine	0.85 + 1.0 - 1.5 pts. 0.85 - 1.0 + 1.0 - 1.5 pts. 1.33 + 1.0 - 1.5 pts.	
Other Peanut-Growing States	Sandy, loamy sand Sandy loam Fine	1.0 - 1.33 + 1.5 - 2.0 pts. 1.0 - 1.33 + 1.5 - 2.0 pts. 1.33 + 1.5 - 2.0 pts.	

Follow all use directions, limitations, restrictions, precautions, and instructions regarding application to peanuts on the **Sharda Metolachlor 86.4EC** and Prowl labels.

Tank Mixture or Sequentially with Starfire

Sharda Metolachlor 86.4EC + Starfire applied at ground cracking or sequentially will control or suppress small (1-6") emerged annual grass and broadleaf weeds and provide residual control of weed species listed in the **Sharda Metolachlor 86.4EC Applied Alone** section of this label. Apply 11 fl. oz./A of Starfire with the appropriate **Sharda Metolachlor 86.4EC** rate from the **Peanuts-Sharda Metolachlor 86.4EC Alone** section in a minimum spray volume of 20 gals./A with ground equipment. A second application of **Sharda Metolachlor 86.4EC** + Starfire may be made 28 days after ground cracking. (Refer to the **Peanuts-Sharda Metolachlor 86.4EC Combinations-Multiple Applications** section of this label for geographical areas where multiple applications are indicated.) A second Starfire

application may be made in all peanut growing areas if needed. Refer to the respective labels and follow all directions, limitations, and restrictions for each product.

Tank Mixture or Sequentially with Starfire + Basagran

Adding Basagran to the **Sharda Metolachlor 86.4EC** + Starfire mixture improves control of prickly sida, cocklebur, smartweed, and bristly starbur. **Sharda Metolachlor 86.4EC** + Starfire + Basagran applied at ground cracking or sequentially will control or suppress small (1-6") emerged annual grass and broadleaf weeds and provide residual control of weed species listed in the **Sharda Metolachlor 86.4EC Applied Alone** section of this label. Apply 1 pt./A of Basagran + 11 fl. oz./A of Starfire with the appropriate **Sharda Metolachlor 86.4EC** rate from the **Peanuts-Sharda Metolachlor 86.4EC Alone** section in a minimum spray volume of 20 gals./A with ground equipment. A second application of **Sharda Metolachlor 86.4EC** + Starfire + Basagran may be made 28 days after ground cracking. (Refer to the **Peanuts-Sharda Metolachlor 86.4EC Combinations-Multiple Applications** section of this label for geographical areas where multiple applications are indicated.) A second Starfire + Basagran application may be made in all peanut growing areas, if needed. Refer to the respective labels and follow all directions, limitations, and restrictions for each product.

Tank Mixture or Sequentially with Starfire + Butyrac 200 or Butoxone 200

Adding Butyrac 200 or Butoxone 200 to the **Sharda Metolachlor 86.4EC** + Starfire mixture improves control of sicklepod, morningglory, and cocklebur. **Sharda Metolachlor 86.4EC** + Starfire + Butyrac 200 or Butoxone 200 applied at ground cracking or sequentially will control or suppress small (1-6") emerged annual grass and broadleaf weeds and provide residual control of weed species listed in the **Sharda Metolachlor 86.4EC Applied Alone** section of this label. Apply 11 fl. oz./A of Starfire + 8-16 fl. oz./A (0.125-0.25 lb./A) of Butyrac 200 or Butoxone 200 with the appropriate **Sharda Metolachlor 86.4EC** rate from the **Peanuts- Sharda Metolachlor 86.4EC Alone** section in a minimum spray volume of 20 gals./A with ground equipment. A second application of **Sharda Metolachlor 86.4EC** + Starfire + Butyrac 200 or Butoxone 200 may be made 28 days after ground cracking. (Refer to the **Peanuts-Sharda Metolachlor 86.4EC Combinations-Multiple Applications** section of this label for geographical areas where multiple applications are indicated.) A second Starfire + Butyrac 200 or Butoxone 200 application may be made in all peanut growing areas if needed. Refer to the respective labels and follow all directions, limitations, and restrictions for each product.

Tank Mixture or Sequentially with Basagran

Sharda Metolachlor 86.4EC + Basagran applied at ground cracking or sequentially will control species on the Basagran label and provide residual control of species listed in the **Sharda Metolachlor 86.4EC Applied Alone** section of this label. Apply 1-2 pts./A of Basagran in 20 gals./A, depending on weed species and stage of growth as specified on the Basagran label, with the appropriate **Sharda Metolachlor 86.4EC** rate from the **Peanuts-Sharda Metolachlor 86.4EC Alone** section. A second application of the combination may be made before peanut pegging. (Refer to the **Peanuts-Sharda Metolachlor 86.4EC Combinations-Multiple Applications** section of this label for geographical areas where multiple applications are indicated.) A second Basagran application may be made in all peanut growing areas if needed. Refer to the respective labels and follow all directions, limitations, and restrictions for each product.

Tank Mixture or Sequentially with Basagran + Butyrac 200 or Butoxone 200

Sharda Metolachlor 86.4EC + Basagran + Butyrac 200 or Butoxone 200 applied at ground cracking or sequentially will control species on the Basagran label and on the Butyrac or Butoxone labels, especially morningglories. Apply 1.5-2 pts./A of Basagran + 8 fl. oz./A of Butyrac 200 or Butoxone 200 in 20 gals./A, depending on weed species and stage of growth as specified on the Basagran label, with the appropriate **Sharda Metolachlor 86.4EC** rate from the **Peanuts-Sharda Metolachlor 86.4EC Alone** section. A second application of the combination may be made before peanut pegging. (Refer to the **Peanuts-Sharda Metolachlor 86.4EC Combinations-Multiple Applications** section of this label for geographical areas where multiple applications are indicated.) A second Basagran + Butyrac 200 or Butoxone 200 application may be made in all peanut growing areas, if needed. Refer to the respective labels and follow all directions, limitations, and restrictions for each product.

Tank Mixture or Sequentially with Storm®

Sharda Metolachlor 86.4EC + Storm applied at ground cracking through 2 expanded tetra foliate leaves or **Sharda Metolachlor 86.4EC** applied according to the directions for **Sharda Metolachlor 86.4EC Alone** and followed with an at-cracking through post-emergence treatment of Storm as specified on its label will control species on the Storm label and provide residual control of species listed in the **Sharda Metolachlor 86.4EC Applied Alone** section of this label. **Sharda Metolachlor 86.4EC** will not control emerged weeds. Refer to the **Peanuts-Sharda Metolachlor 86.4EC Alone** section and to the Storm label and follow all directions, limitations, and restrictions for each product.

POD CROPS

Pod crops, including garbanzo, great northern beans, kidney beans, lima beans, mung beans, navy beans, peas (English*; southern peas, such as blackeye, pinkeye, crowder, etc.), pinto beans, snap beans (green, wax, string), lentils, and lupines (sweet, white, white sweet, and grain).

Sharda Metolachlor 86.4EC ALONE

Apply **Sharda Metolachlor 86.4EC**, either pre-plant incorporated or pre-emergence, using the appropriate rate specified below.

Pre-Plant Incorporated or Pre-Emergence: Follow instructions for use of **Sharda Metolachlor 86.4EC** alone under **Application Instructions**.

Coarse soils (<3% organic matter): Apply 1.0-1.33 pts./A.

Coarse soils (>3% organic matter): Apply 1.33 pts./A.

Medium soils: Apply 1.33-1.67 pts./A.

Fine soils (<3% organic matter): Apply 1.33-1.67 pts./A.

Fine soils (>3% organic matter): Apply 1.67-2 pts./A.

Restrictions:

- Do not use on English peas in northeastern U.S.; other areas only make pre-emergence applications.
- Do not cut for hay within 120 days following an **Sharda Metolachlor 86.4EC** application.
- Do not apply more than 3.0 pts./A of **Sharda Metolachlor 86.4EC** during any one crop year.

Sharda Metolachlor 86.4EC COMBINATIONS

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Restriction:

- When applying **Sharda Metolachlor 86.4EC** in combination on pod crops, do not cut for hay within 120 days following application.

Tank Mixture and Sequential Applications with Eptam-Beans (Green or Dry)

This mixture controls all weeds controlled by **Sharda Metolachlor 86.4EC** alone and by Eptam alone. Refer to the **Sharda Metolachlor 86.4EC Applied Alone** section of this label for weeds controlled by **Sharda Metolachlor 86.4EC** alone and to the Eptam label for weeds controlled by Eptam.

Pre-Plant Incorporated: Follow instructions for use of **Sharda Metolachlor 86.4EC** alone under **Application Instructions**.

Sequential: Apply Eptam alone pre-plant incorporated as specified on that label. Follow with a pre-emergence application of **Sharda Metolachlor 86.4EC** at rates specified for **Sharda Metolachlor 86.4EC** alone, during planting (behind the planter), or after planting but before the weeds or crop emerge.

Refer to the **PRODUCT INFORMATION** section of this label and to the Eptam label for weather, cultural practices, and all other restrictions, precautions and limitations that affect performance of these products.

Apply 2.5-4.5 pts./A of Eptam 7E with **Sharda Metolachlor 86.4EC** as specified. Refer to the Eptam label for rate limitations depending on geographical area and for species and varietal restrictions.

Coarse soils (<3% organic matter): Apply 0.85 pts./A.

Coarse soils (>3% organic matter): Apply 1.0 pts./A.

Medium soils (<3% organic matter): Apply 1.0 pts./A.

Medium soils (>3% organic matter): Apply 1.33 pts./A.

Fine soils (<3% organic matter): Apply 1.33 pts./A.

Fine soils (>3% organic matter): Apply 1.33-1.67 pts./A.

Restriction:

- Do not exceed 3.5 pts./A of Eptam 7E on small white beans or green beans grown on coarse textured soils.

Tank Mixture with Treflan-Beans (Dry-Kidney, Navy, Pinto, etc.; Lima; and Snap)

Sharda Metolachlor 86.4EC + Treflan tank mix applied pre-plant incorporated controls those weeds listed under **Sharda Metolachlor 86.4EC Applied Alone** and those weeds listed for Treflan alone on the Treflan label. **Sharda Metolachlor 86.4EC** + Treflan may be applied by ground or by aerial equipment and incorporated up to 14 days prior to planting. Follow the instructions on this label and on the respective Treflan label using equipment that provides uniform 2" incorporation.

Apply **Sharda Metolachlor 86.4EC** + Treflan tank mix using the appropriate **Sharda Metolachlor 86.4EC** rate specified for **Sharda Metolachlor 86.4EC** alone, and the Treflan rate from the Dry Beans, and the Lima and Snap Beans sections of the respective Treflan label. Choose the product rate for the specific soil texture/organic matter classification and weed species expected.

Note: Follow all restrictions and precautions on the respective Treflan label and in the **Pod Crops-Sharda Metolachlor 86.4EC Alone** section of this label.

POTATOES

Sharda Metolachlor 86.4EC ALONE

Apply **Sharda Metolachlor 86.4EC**, either incorporated, pre-emergence, or after hilling/lay-by, according to directions specified below for control of weeds listed under the **PRODUCT INFORMATION** section. Within a rate range, use the lower rate within the specified rate range on soils relatively coarse-textured or low in organic matter; use the higher rate within the specified rate range on soils relatively fine-textured or high in organic matter. Effectiveness will be reduced if later cultural practices expose untreated soil.

Incorporated: Apply **Sharda Metolachlor 86.4EC** at 1.0-2.0 pts./A to the soil and incorporate into the top 3" before planting using a finishing disk, harrow, rolling cultivator, or similar implement. Planting and later cultural practices must not bring untreated soil to the surface. Post-plant incorporated application may be made any time after planting to drag-off but before potato emergence. Use an

implement that evenly distributes **Sharda Metolachlor 86.4EC** in the top 2" of soil. Do not damage potato seed pieces or sprouts with incorporation equipment.

Pre-Emergence: Apply **Sharda Metolachlor 86.4EC** at 1.0-2.0 pts./A, either after planting as a pre-emergence, delayed Pre-emergence, after drag-off or hilling treatment, but before weeds emerge. Up to 2.75 pts./A of **Sharda Metolachlor 86.4EC** alone may be used where soil organic matter is between 6% and 20%.

After Hilling/Lay-by: Apply 1.67 pts./A of **Sharda Metolachlor 86.4EC** after hilling/at lay-by to control **Sharda Metolachlor 86.4EC** sensitive species for remainder of the growing season. This application will not control emerged weeds. It may be applied over a previous **Sharda Metolachlor 86.4EC** application but do not apply more than 3.7 pts./A of **Sharda Metolachlor 86.4EC** in a single crop season.

Restrictions:

- Do not use on sweet potatoes or yams.
- Do not use on muck or peat soils. If cool, wet soil conditions occur after application, **Sharda Metolachlor 86.4EC** may delay maturity and/or reduce yield of Superior and other early maturing potato varieties.
- Do not apply both as a pre-emergence and an incorporated treatment.
- Potatoes treated with **Sharda Metolachlor 86.4EC** must not be harvested within 60 days after the at-planting to drag-off application or within 40 days after a lay-by application.
- Do not use in Kern County, CA.

Sharda Metolachlor 86.4EC COMBINATIONS

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank Mixture with Sencor or Lexone

In addition to those weeds controlled by **Sharda Metolachlor 86.4EC** alone, **Sharda Metolachlor 86.4EC** applied in tank mix combination with, or sequentially with, any of the registered Sencor or Lexone formulations, also controls the following broadleaf weeds: hemp sesbania, lambsquarters, prickly sida, ragweed, smartweed, velvetleaf, Venice mallow, and wild mustard.

Sharda Metolachlor 86.4EC applied in tank mix combination with, or sequentially with, any of the registered Sencor or Lexone formulations, partially controls cocklebur, hairy nightshade, and jimsonweed.

Sharda Metolachlor 86.4EC at 1.0-2.0 pts./A plus the labeled Sencor/Lexone use rate may be used pre-emergence through after last hilling. Apply 1.0-1.33 pts./A of **Sharda Metolachlor 86.4EC** on coarse soils and 1.33-2.0 pts./A on other soil textures. Within this rate range, use the lower rate within the specified rate range on soils relatively coarse-textured or low in organic matter; use the higher rate within the specified rate range on soils relatively fine-textured or high in organic matter. Effectiveness will be reduced if later cultural practices expose untreated soil. **Sharda Metolachlor 86.4EC** will not control emerged weeds.

Refer to the Sencor or Lexone labels for precautionary statements, restrictions, application information, and weeds controlled.

Precautions:

- Make post-emergence applications to potatoes only as a directed or semi-directed spray to avoid chlorosis, minor necrosis, or leaf distortion.

Restrictions:

- Do not use **Sharda Metolachlor 86.4EC** + Sencor or Lexone on potatoes in Kern County, CA.
- Do not apply to sweet potatoes or yams.
- Do not harvest potatoes treated with **Sharda Metolachlor 86.4EC** in tank mixture with Sencor or Lexone within 60 days after application.
- Do not harvest potatoes within 40 days after a lay-by application of **Sharda Metolachlor 86.4EC**.
- Do not use this tank mixture on muck or peat soils.

Sharda Metolachlor 86.4EC + Lorox Tank Mixture (East of Rocky Mountains)

Apply **Sharda Metolachlor 86.4EC** in a tank-mix combination with any of the registered Lorox formulations as a pre-emergence broadcast application to potatoes. Apply to the soil surface after planting and before emergence of the crop or after final drag-off according to the rates specified in the **Sharda Metolachlor 86.4EC + Lorox-Potatoes (East of Rocky Mountains)** table.

Sharda Metolachlor 86.4EC + Lorox-Potatoes (East of Rocky Mountains)

SOIL TEXTURE	SOIL TEXTURE	BROADCAST RATES PER ACRE	
		SHARDA METOLACHLOR 86.4EC	LOROX*
1-3% Organic Matter	Coarse (Sandy loam)	1.0 pts.	1.0 - 1.5 lbs.
	Medium (Loam, silt loam, silt)	1.33 pts.	1.5 - 2.0 lbs.
3-5% Organic Matter	Coarse (Sandy loam)	1.33 pts.	1.5 - 2.0 lbs.

	Medium (Loam, silt loam, silt)	1.5 - 2.0 pts.	2.0 - 2.5 lbs.
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*When using Lorox L or Lorox DF, use equivalent rates. 1 pt. of Lorox L equals 1 lb. of Lorox DF.

Restriction:

- Do not use on sands or loamy sands and do not incorporate or spray over the top of emerged potatoes.

Refer to the **PRODUCT INFORMATION** section of this label and to the Lorox label for precautionary statements, restrictions, application instructions, and weeds controlled.

Tank Mixture with Prowl 4E

In addition to the weeds controlled by **Sharda Metolachlor 86.4EC** alone, this tank mixture with Prowl 4E controls kochia, lambsquarters, purslane, annual spurge, stinging nettle, and others specified on the Prowl 4E Alone label. Apply **Sharda Metolachlor 86.4EC** + Prowl 4E pre-emergence, pre-emergence incorporated, or early post-emergence, according to the specific directions on the Prowl 4E label, using the rates in the **Sharda Metolachlor 86.4EC + Prowl 4E-Potatoes** table.

Sharda Metolachlor 86.4EC + Prowl 4E-Potatoes

SOIL TEXTURE	BROADCAST RATES PER ACRE	
	SHARDA METOLACHLOR 86.4EC + PROWL 4E*	
<3% Organic Matter Coarse Medium Fine	1.0 - 1.33	+ 1.0 - 1.5 pts.
	1.33 pts.	+ 1.5 - 2.0 pts.
	1.33 - 1.67 pts.	+ 2.0 - 3.0 pts.
3-5% Organic Matter Coarse Medium Fine	1.0 - 1.33 pts.	+ 1.0 - 1.5 pts.
	1.33 - 1.67 pts.	+ 2.0 - 3.0 pts.
	1.67 - 2.0 pts.	+ 3.0 pts.

*When using other formulations of Prowl, use equivalent rates of active ingredient.

Refer to the **Sharda Metolachlor 86.4EC** and Prowl 4E labels and observe all directions, timings, limitations, precautions, and restrictions concerning the use of these products on potatoes and follow the most restrictive.

Tank Mixture with Prowl 4E + Eptam

In addition to the weeds controlled by **Sharda Metolachlor 86.4EC** alone, this tank mixture will control those species on the Prowl 4E and Eptam labels. Refer to the **Sharda Metolachlor 86.4EC** + Prowl 4E labels for rates of those products and add Eptam 7E at 3.5-7.0 pts./A, depending on geographical area. Refer to the respective **Sharda Metolachlor 86.4EC**, Prowl 4E, and Eptam labels and observe all directions, limitations, precautions, and restrictions concerning the use of these products on potatoes and follow the most restrictive.

SAFFLOWER

Sharda Metolachlor 86.4EC ALONE

Pre-Plant Incorporated or Pre-Emergence: Follow instructions for use of **Sharda Metolachlor 86.4EC** alone under **Application Instructions**.

Coarse soils (<3% organic matter): Apply 1.0-1.33 pts./A.

Coarse soils (>3% organic matter): Apply 1.33 pts./A.

Medium soils: Apply 1.33-1.67 pts./A.

Fine soils (<3% organic matter): Apply 1.33-1.67 pts./A.

Fine soils (>3% organic matter): Apply 1.67-2.0 pts./A.

GRAIN OR FORAGE SORGHUM (SEED TREATED WITH CONCEP® OR SCREEN®)

Sharda Metolachlor 86.4EC ALONE

Apply **Sharda Metolachlor 86.4EC** either pre-plant surface, pre-plant incorporated, or pre-emergence, using the appropriate rate specified below. Apply **Sharda Metolachlor 86.4EC** alone only when the sorghum seed has been properly treated by the seed company with Concep or Screen.

Pre-Plant Surface-Applied: Refer to instructions for use of **Sharda Metolachlor 86.4EC** under **Application Instructions**. For minimum-tillage or no-tillage systems only, **Sharda Metolachlor 86.4EC** may be applied up to 45 days before planting in CO, IA, IL, KS, MO, NE, and SD. Use only split applications for treatments made 30-45 days prior to planting with $\frac{2}{3}$ of the broadcast rate applied initially and the remaining $\frac{1}{3}$ at planting. Apply 1.50 pts./A of **Sharda Metolachlor 86.4EC** on medium soils or 1.67 pts./A on fine soils. Treatments less than 30 days prior to planting may be made either as a split or single application. Apply 1.33 pts./A of **Sharda Metolachlor 86.4EC** on coarse soils not more than 2 weeks prior to planting. Under dry conditions, irrigate after application to move **Sharda Metolachlor 86.4EC** into the soil.

Pre-Plant Incorporated or Pre-Emergence: Refer to instructions for use of **Sharda Metolachlor 86.4EC** under **Application Instructions**.

Make broadcast as follows:

Coarse soils: 1.0-1.33 pts./A

Medium soils: 1.33-1.50 pts./A

Fine soils: 1.33-1.67 pts./A

Precautions:

- If sorghum seed is not properly treated with Concep or Screen, **Sharda Metolachlor 86.4EC** will severely injure the crop.
- Under high soil moisture conditions prior to sorghum emergence, injury may occur following the use of **Sharda Metolachlor 86.4EC**. The crop will normally outgrow this effect.

Restrictions:

- Do not use **Sharda Metolachlor 86.4EC** on sorghum grown under dry mulch tillage.
- Except for the split pre-plant surface treatment, do not make more than one application per year.

Sharda Metolachlor 86.4EC COMBINATIONS

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Sharda Metolachlor 86.4EC tank mixtures with AAtrex may be applied in water or fluid fertilizer. Apply **Sharda Metolachlor 86.4EC** in tank mixtures only when the sorghum seed has been properly treated by the seed company with Concep or Screen.

IMPORTANT: FOR TANK MIXTURES WITH AATREX (OR OTHER BRANDS OF ATRAZINE)

If applying **Sharda Metolachlor 86.4EC** in tank mixture with AAtrex, all the restrictions and rate limitations on the AAtrex label must be followed if the label directions are more restrictive/protective than those on this label. In addition, if AAtrex is/must be applied at rates lower than those listed on this label, broadleaf weed control may be affected. Refer to the AAtrex label for weeds controlled at the reduced rates.

Precautions:

Applications of **Sharda Metolachlor 86.4EC** + AAtrex on highly alkaline soils or on eroded areas where calcareous subsoils are exposed may cause sorghum injury.

If sorghum seed is not properly treated with Concep or Screen, **Sharda Metolachlor 86.4EC** + AAtrex may severely injure the crop.

Under high soil moisture conditions prior to sorghum emergence, injury may occur following the use of **Sharda Metolachlor 86.4EC** + AAtrex. The crop will normally outgrow this effect.

Restrictions:

- Do not use **Sharda Metolachlor 86.4EC** + AAtrex on sorghum grown under dry mulch tillage.
- Do not make more than one application per year Except for the split pre-plant surface treatment.

Tank Mixture with AAtrex

In addition to the weeds controlled by **Sharda Metolachlor 86.4EC** alone, **Sharda Metolachlor 86.4EC** + AAtrex also controls the following broadleaf weeds when applied either pre-plant surface, pre-plant incorporated, or pre-emergence:

Cocklebur	Hairy Nightshade	Morningglory	Smartweed
Common Purslane	Lambsquarters	Ragweed	Velvetleaf

Pre-Plant Surface-Applied: Refer to instructions for use of **Sharda Metolachlor 86.4EC** under **Application Instructions**. For minimum-tillage or no-tillage systems only, **Sharda Metolachlor 86.4EC** + AAtrex may be applied up to 45 days prior to planting in IA, IL, eastern KS, MO, NE, and SD. Use only split applications for treatments made 30-45 days prior to planting with 2/3 of the broadcast rate applied initially and the remaining 1/3 at planting. Apply as follows:

Medium soils with >1.5% organic matter: 1.50 pts./A of **Sharda Metolachlor 86.4EC** + 1.7 - 2 lbs./A of AAtrex Nine-O*

Fine soils with <1.5% organic matter: 1.50 pts./A of **Sharda Metolachlor 86.4EC** + 1.7 - 2 lbs./A of AAtrex Nine-O

Fine soils with >1.5% organic matter: 1.67 pts./A of **Sharda Metolachlor 86.4EC** + 2 - 2.2 lbs./A of AAtrex Nine-O

*When using AAtrex 4L, use equivalent rates. One lb. of AAtrex Nine-O equals 1.8 pts. of AAtrex 4L.

Treatments less than 30 days prior to planting may be made either as a split or single application. Under dry conditions, irrigate after application to move **Sharda Metolachlor 86.4EC** + AAtrex into the soil.

Restrictions:

- Do not use on coarse soils.
- Do not use on medium soils with <1.5% organic matter.

Pre-Plant Incorporated or Pre-Emergence: Refer to instructions for use of **Sharda Metolachlor 86.4EC** under **Application Instructions**. Apply as follows:

Medium soils with >1.5% organic matter: 1.0 pts./A of **Sharda Metolachlor 86.4EC** + 1.3 lbs./A of AAtrex Nine-O*

Fine soils with <1.5% organic matter: 1.0 pts./A of **Sharda Metolachlor 86.4EC** + 1.3 lbs./A of AAtrex Nine-O

Fine soils with >1.5 organic matter: 1.2-1.33 pts./A of **Sharda Metolachlor 86.4EC** + 1.6 - 1.8 lbs./A of AAtrex Nine-O

*When using AAtrex 4L, use equivalent rates. One lb. of AAtrex Nine-O equals 1.8 pts. of AAtrex 4L.

Restrictions:

- Do not use on coarse soils.
- Do not use on medium soils with <1.5% organic matter.
- Do not use in NM, OK, or TX, except in northeast OK and the TX Gulf Coast and Blacklands areas.
- Do not apply pre-plant incorporated in AZ or the Imperial Valley of CA.

Tank Mixture of Sharda Metolachlor 86.4EC or Sharda Metolachlor 86.4EC + AAtrex, with Gramoxone Extra, Landmaster BW, or Roundup for Minimum-Tillage or No-Tillage Systems

In minimum-tillage or no-tillage systems where sorghum (seed treated with Concep or Screen) is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, the contact herbicides Gramoxone Extra, Landmaster BW, or Roundup may be tank mixed with **Sharda Metolachlor 86.4EC** or **Sharda Metolachlor 86.4EC** + AAtrex. In Minimum-Tillage and No-Tillage systems, mix with Gramoxone Extra for control of most emerged annual weeds and suppression of perennial weeds; or with Landmaster BW for suppression of emerged field bindweed and control or suppression of annual weeds; or with Roundup for control of most emerged annual and perennial weeds. Refer to the label of each product used in combination and observe the planting details, restrictions, and all other precautions and limitations.

The **Sharda Metolachlor 86.4EC** or **Sharda Metolachlor 86.4EC** + AAtrex portion of the tank mixture provides pre-emergence control of the weeds listed on this label under the respective sections.

Application Instructions: Apply before, during, or after planting, but before sorghum emerges, at the appropriate rates listed under **Grain or Forage Sorghum-Sharda Metolachlor 86.4EC Alone** or **-Sharda Metolachlor 86.4EC Combinations- Sharda Metolachlor 86.4EC + AAtrex**, respectively. Add Gramoxone Extra, Landmaster BW, or Roundup at the following broadcast rates:

Gramoxone Extra:

Weeds 1-3": 1.5-2 pts./A

Weeds 3-6": 2-2.5 pts./A

Weeds 6": 2.5-3 pts./A

Apply surfactant at 1 or 2 pts./100 gals. of spray mixture with 75% or greater or 50-74% nonionic active ingredient, respectively. This treatment will not control weeds taller than 6".

Landmaster BW: 27-54 oz./A depending on weed species and size. See the Landmaster BW label for weeds controlled, rates for specific weeds, and other information concerning use.

Roundup: See the Roundup or Roundup RT label for weeds controlled, rates, and other use directions. Apply in a minimum of 20 gals. of water per acre with conventional spray equipment.

SOYBEANS

Sharda Metolachlor 86.4EC ALONE

Apply **Sharda Metolachlor 86.4EC**, either pre-plant surface-applied, pre-plant incorporated, pre-emergence, or post-emergence using the appropriate rate specified below.

Pre-Plant Surface-Applied, Pre-Plant Incorporated, Pre-Emergence: Follow instructions for use of **Sharda Metolachlor 86.4EC** alone under **Application Instructions**.

Post-Emergence: Follow the **Tank Mixture** instructions under **Post-Emergence Applications**.

Pre-Plant Surface-Applied

Fall Application (Apply after September 30th in MN, ND, SD, WI and North of Route 30 in IA; Apply after October 15th north of Route 91 in NE and South of Route 30 in IA; Apply after October 31st north of Route 136 in IL): In all locations, apply to crop stubble after harvest when the sustained soil temperature at a 4" depth is less than 55°F and falling. In minimum-till or no-tillage systems on soils having greater than 2.5% organic matter, use 1.67-2.0 pts./A on medium-textured and 2.0 pts./A on fine-textured soils. A tillage operation may precede the application. Minimize furrow and ridge formation in the tillage operations.

Restrictions:

- If a spring application is made, the total rate of the fall plus spring applications must not exceed the maximum total rate for soybeans.
- A fall and/or a spring tillage may follow application, but do not exceed an incorporation depth greater than 2-3".

- Do not apply to frozen ground.

Use on medium and fine soils with minimum-tillage or no-tillage systems in CO, CT, DE, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, MO, MT, ND, NE, NH, NY, OH, PA, RI, SD, TN, VA, VT, WI, WV, and WY. Apply 2/3 the labeled rate of **Sharda Metolachlor 86.4EC** (1.67 pts./A on medium soils and 2.0 pts./A on fine soils) as a split treatment 30-45 days prior to planting and the remainder at planting. Applications made less than 30 days before planting may be as either a split or single treatment. Apply 1.33 pts./A on coarse soils not more than 2 weeks prior to planting.

Pre-Plant Incorporated or Pre-Emergence: Apply **Sharda Metolachlor 86.4EC** as follows:

Coarse soils with <3% organic matter: 1.0-1.33 pts./A

Coarse soils with >3% organic matter: 1.33 pts./A

Medium soils: 1.33-1.67 pts./A

Fine soils with <3% organic matter: 1.33-1.67 pts./A

Fine soils with >3% organic matter: 1.67-2.0 pts./A

Restrictions:

- The total **Sharda Metolachlor 86.4EC** rate applied to soybeans during any one crop must not exceed 2.75 pts./A.
- Do not graze or feed treated soybean forage, hay, or straw to livestock 30 days following treatment.

Note: On soybeans, **Sharda Metolachlor 86.4EC** may be used up to 2.75 pts./A as a pre-plant surface-applied, pre-plant incorporated, or pre-emergence treatment on soils having an organic matter content between 6-20%.

Post-Emergence:

From emergence up through the third trifoliate leaf stage:

Apply 1.0-1.33 pts./A as a post-emergence treatment to soybeans from emergence up through the **third trifoliate leaf stage**. **Sharda Metolachlor 86.4EC** will not control emerged weeds so it must be applied to a weed-free surface or in a tank mixture with products that provide post-emergence control of weeds present at the time of application.

From emergence up through the fifth trifoliate leaf stage:

Apply 1.0-1.33 pts./A as a post-emergence treatment to soybeans from emergence up through the **fifth trifoliate leaf stage**. **Sharda Metolachlor 86.4EC** will not control emerged weeds so it must be applied to a weed-free surface or in a tank mixture with products that provide post-emergence control of weeds present at the time of application.

Note: Make post-emergence applications at least 90 days before harvest.

Restrictions:

- Do not apply more than 1.33 pts./A post-emergence.
- Do not graze or feed treated forage or hay from soybeans to livestock following a post-emergence application.
- Do not make a post-emergence application of **Sharda Metolachlor 86.4EC** if a pre-plant surface, pre-plant incorporated, or
- Pre-emergence application of metolachlor products have already been applied.

Sharda Metolachlor 86.4EC COMBINATIONS

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Water or fluid fertilizer may be used as carrier for **Sharda Metolachlor 86.4EC** in combination with Sencor, Lexone, Lorox, Lorox Plus, Gemini, Canopy, Preview, Pursuit, Scepter, Sonalan, or Command.

Note: For all of the following combinations, **Sharda Metolachlor 86.4EC** may be used up to 2.5 pts./A on soils having an organic matter content between 6-20%.

Restriction:

- Do not apply more than 2.75 pts./A of **Sharda Metolachlor 86.4EC** during any one crop year.

Pre-Plant/Pre-Emergence Applications

Tank Mixture with Sencor or Lexone

In addition to those weeds controlled by **Sharda Metolachlor 86.4EC** alone, **Sharda Metolachlor 86.4EC** + Sencor or Lexone, when applied as directed, controls the following broadleaf weeds:

Hairy Nightshade	Prickly Sida	Velvetleaf
Hemp Sesbania	Ragweed	Venice Mallow
Lambsquarters	Smartweed	Wild Mustard

Sharda Metolachlor 86.4EC + Sencor or Lexone, when applied as directed, partially controls cocklebur and jimsonweed.

Apply **Sharda Metolachlor 86.4EC** and Sencor or Lexone pre-plant incorporated or pre-emergence using the appropriate rates from the **Sharda Metolachlor 86.4EC + Sencor or Lexone-Soybeans** table.

Pre-Plant Incorporated or Pre-Emergence:

Follow instructions for use of **Sharda Metolachlor 86.4EC** alone under **Application Procedures**.

Sequential: Apply **Sharda Metolachlor 86.4EC** alone Pre-plant Incorporated, as specified in the **Sharda Metolachlor 86.4EC + Sencor or Lexone-Soybeans** table for this tank mixture. Follow with a pre-emergence application of Sencor or Lexone during planting (behind the planter) or after planting but before weeds or soybeans emerge. Refer to the Sencor or Lexone labels for planting details and soybean variety restrictions.

Sharda Metolachlor 86.4EC + Sencor or Lexone-Soybeans

Do not use on muck or peat with >20% organic matter.

SOIL TEXTURE**	BROADCAST RATES PER ACRE
	SHARDA METOLACHLOR 86.4EC + SENCOR/LEXONE DF*
0.5 - <3% Organic Matter Coarse: Loamy sand (>2% organic matter), sandy loam Medium Fine Mississippi Delta only (Silty clay, clay)	0.85 - 1.0 pt. + 0.33 lb. 1.0 - 1.33 pts. + 0.5 lb. 1.33 pts. + 0.67 lb. 1.33 pts. + 1.0 lb.
>3% Organic Matter Coarse: Loamy sand (>2% organic matter), sandy loam Medium Fine Mississippi Delta only (Silty clay, clay)	1.0 pt. + 0.5 lb. 1.33 pts. + 0.67 lb.*** 1.33 - 1.67 pts. + 0.67 lb. 1.33 - 1.67 pts. + 1.0 lb.
*When using Sencor 4 or Lexone 4L, multiply lbs. of DF by 1.5 to get pts./A. **On all sand and on loamy sand with <2% organic matter, do not use this tank mixture pre-emergence or the sequential treatment. Do not use the tank mixture pre-plant incorporated on any sand, loamy sand, or sandy loam. ***Use 0.5 lb./A if applied pre-plant incorporated.	

Precaution:

- Heavy rains soon after application can cause crop injury, especially in poorly drained areas where water stands for several days.

Restriction:

- Do not use the tank mix or sequential application on soil with <0.5% organic matter or on alkaline soil with a pH >7.4.

Tank Mixture with Lorox

In addition to those weeds controlled by **Sharda Metolachlor 86.4EC** alone, **Sharda Metolachlor 86.4EC + Lorox**, applied pre-emergence, controls lambsquarters, prickly sida, ragweed, smartweed, Venice mallow, and wild mustard.

Sharda Metolachlor 86.4EC + Lorox, when applied as directed, partially controls cocklebur, jimsonweed, morningglory, and velvetleaf.

Pre-Emergence: Apply during planting (behind planter) or after planting, but before weeds or soybeans emerge. Refer to the Lorox label for planting details. Apply the appropriate rates from the **Sharda Metolachlor 86.4EC + Lorox-Soybeans** table.

Precaution:

- To avoid crop injury, do not use on soil with less than 0.5% organic matter.

Sharda Metolachlor 86.4EC + Lorox-Soybeans

Do not use on muck or peat with >20% organic matter.

SOIL TEXTURE*, **	BROADCAST RATES PER ACRE
	SHARDA METOLACHLOR 86.4EC + LOROX DF***
0.5 - <3% Organic Matter Coarse Medium Fine	0.85 pt. + 1 lb. 1.0 pt. + 1 - 1.5 lbs. 1.33 pts. + 2 lbs.
>3% Organic Matter Coarse Medium Fine	1.0 pt. + 1 - 1.5 lbs. 1.33 pts. + 1.5 - 2 lbs. 1.33 - 1.67 pts. + 2.5 - 3 lbs.
*Do not use on sand, gravelly soils, or exposed subsoils. **Do not use on loamy sand except in the northeastern U.S. on loamy sand with >1% organic matter. ***When using Lorox L or Lorox DF, use equivalent rates. One pt. of Lorox L equals 1 lb. of Lorox DF.	

Tank Mixture with Treflan

Sharda Metolachlor 86.4EC + Treflan tank mix applied pre-plant incorporated controls those weeds listed under the **Sharda Metolachlor 86.4EC Applied Alone** section and those weeds listed for Treflan Alone on the Treflan label. **Sharda Metolachlor 86.4EC** + Treflan may be applied by ground or by aerial equipment and incorporated up to 14 days before planting. Follow the procedures on the Treflan and **Sharda Metolachlor 86.4EC** labels using equipment that provides uniform 2-inch incorporation.

Apply **Sharda Metolachlor 86.4EC** + Treflan tank mix, using the appropriate rate from the **Soybeans-Sharda Metolachlor 86.4EC Alone** section of this label and the Treflan Alone section of the Treflan label for the specific soil texture/organic matter classification and weed species expected.

To control DNA-resistant goosegrass* and other species on the respective labels where the soil organic matter is 3% or less, apply the rate listed in the **Sharda Metolachlor 86.4EC + Treflan-Organic Matter Content Less Than 3%** table.

Sharda Metolachlor 86.4EC + Treflan-Organic Matter Content Less Than 3%

Follow all restrictions and precautions on the respective Treflan label and in the **Soybeans- Sharda Metolachlor 86.4EC Alone** section of this label.

SOIL TEXTURE	BROADCAST RATES PER ACRE*	
	SHARDA METOLACHLOR 86.4EC + TREFLAN EC**	
<3% Organic Matter Coarse Medium Fine	0.85 - 1.0 pt.	
	1.0 pt.	
	1.33 pts.	
<2% Organic Matter Coarse Medium Fine	1 pt.	
	1.5 pts.	
	2 pts.	
2-3% Organic Matter Coarse Medium Fine	1.5 pts.	
	1.5 pts.	
	2.0 pts.	

*Where a range of rates is given for **Sharda Metolachlor 86.4EC**, use the minimum rate within the specified rate range where DNA-resistant goosegrass is the predominant species.
**When Treflan MTF or Treflan 5 is used, use comparable rates. Multiply pts. of Treflan E.C. by 1 for Treflan MTF and by 0.8 for Treflan 5.

Tank Mixture with Scepter

This tank mixture controls all weeds controlled by **Sharda Metolachlor 86.4EC** alone and by Scepter alone. Refer to the **Sharda Metolachlor 86.4EC Applied Alone** section for weeds controlled by **Sharda Metolachlor 86.4EC** and to the Scepter label for weeds controlled by Scepter. Refer to the Scepter label for geographical locations where this tank mixture may be applied.

Apply **Sharda Metolachlor 86.4EC** + Scepter pre-plant incorporated or pre-emergence using rates in the **Sharda Metolachlor 86.4EC + Scepter-Soybeans** table. Follow use directions under **Application Instructions** on the Scepter label. For Pre-Plant Incorporated Applications, apply and incorporate within 30 days before planting. Observe all other restrictions, precautions and limitations on the Scepter labels.

Sharda Metolachlor 86.4EC + Scepter-Soybeans

Do not use on muck or peat with >20% organic matter.

SOIL TEXTURE	BROADCAST RATES PER ACRE	
	SHARDA METOLACHLOR 86.4EC + SCEPTER	
<3% Organic Matter Coarse Medium Fine	0.85 pt. + 0.67 pt.	
	1.0 + 0.67 pt.	
	1.33 pts. + 0.67 pt.	
>3% Organic Matter Coarse Medium Fine	1.0 pt. + 0.67 pt.	
	1.33 pts. + 0.67 pt.	
	1.33 - 1.67 pts.* + 0.67 lb.	

*Use the higher rate within the specified rate range of **Sharda Metolachlor 86.4EC** if heavy weed infestations are expected.

Restrictions:

- Do not apply within 90 days of harvest.
- Do not graze or feed treated soybean forage, hay, or straw to livestock.

Tank Mixture with Lorox Plus

This tank mixture controls all weeds controlled by **Sharda Metolachlor 86.4EC** alone and by Lorox Plus alone. Refer to the **Sharda Metolachlor 86.4EC Applied Alone** section for weeds controlled by **Sharda Metolachlor 86.4EC** and to the Lorox Plus label for weeds controlled by Lorox Plus.

Apply **Sharda Metolachlor 86.4EC** + Lorox Plus pre-emergence after planting, but before soybeans emerge, using rates in the **Sharda Metolachlor 86.4EC+ Lorox Plus-Soybeans** table. Follow all use directions, limitations, restrictions, precautions, information regarding application to soybeans, and rotational restrictions on the **Sharda Metolachlor 86.4EC** and Lorox Plus labels.

Sharda Metolachlor 86.4EC+ Lorox Plus-Soybeans

SOIL TEXTURE	BROADCAST RATES PER ACRE	
	SHARDA METOLACHLOR 86.4EC + LOROX PLUS (60 DF)	
0.5%-3% Organic Matter		
Coarse		0.85 pt. + 12 - 14 oz.
Medium		1.0 pt. + 14 - 16 oz.
Fine		1.33 pts. + 16 - 18 oz.

Restriction:

- Do not apply to sand, or to any soil <0.5% organic matter, or to any soil with pH >6.8.

Tank Mixture with Gemini

This tank mixture controls all weeds controlled by **Sharda Metolachlor 86.4EC** alone and by Gemini alone. Refer to the **Sharda Metolachlor 86.4EC Applied Alone** section for weeds controlled by **Sharda Metolachlor 86.4EC** and to the Gemini label for weeds controlled by Gemini. Apply **Sharda Metolachlor 86.4EC** + Gemini pre-emergence after planting, but before soybeans emerge, using rates in the **Sharda Metolachlor 86.4EC + Gemini-Soybeans** table.

Note: Follow all use directions, limitations, precautions, information regarding application to soybeans, and rotational restrictions on the **Sharda Metolachlor 86.4EC** and Gemini labels.

Sharda Metolachlor 86.4EC + Gemini-Soybeans

SOIL TEXTURE	BROADCAST RATES PER ACRE	
	SHARDA METOLACHLOR 86.4EC + GEMINI (60 DF)	
0.5% -3% Organic Matter		
Coarse (Sandy loam only)		0.85 pt. + 12 - 16 oz.
Medium		1.0 pt. + 16 - 20 oz.
Fine		1.33 pts. + 20 - 24 oz.

Restriction:

- Do not apply to sand or loamy sand, or to any soil <0.5% organic matter, or to any soil with pH >7.0, except as in the directions for use on the Gemini label.

Tank Mixture with Canopy

This tank mixture controls all weeds controlled by **Sharda Metolachlor 86.4EC** alone and by Canopy alone. Refer to the **Sharda Metolachlor 86.4EC Applied Alone** section for weeds controlled by **Sharda Metolachlor 86.4EC** and to the Canopy label for weeds controlled by Canopy. Apply pre-plant incorporated or pre-emergence using the appropriate rates from the **Sharda Metolachlor 86.4EC + Canopy-Soybeans** table.

Pre-Plant Incorporated: Apply within 2 weeks of planting. Uniformly incorporate into the top 1-2 inches of soil before planting soybeans.

Pre-Emergence: Apply after planting, but before soybeans emerge.

Follow all use directions, varietal restrictions, limitations, precautions, information regarding application to soybeans, and rotational restrictions on the **Sharda Metolachlor 86.4EC** and Canopy labels.

Sharda Metolachlor 86.4EC + Canopy-Soybeans

SOIL TEXTURE	BROADCAST RATES PER ACRE	
	SHARDA METOLACHLOR 86.4EC + CANOPY	
<3% Organic Matter		
Coarse		0.85 pt. + *
Medium		1.0 pt. + *
Fine		1.33 pts. + *
>3% Organic Matter		
Coarse		1.0 pt. + *
Medium		1.33 pts. + *
Fine		1.33 - 1.67 pts. + *

*Refer to the Canopy label for appropriate rate according to geographical location, soil and organic matter classification, and pH limitations.

Restriction:

- Do not apply to sand, or to any soil <0.5% organic matter, or to any soil with pH >7.0, except as in the directions for use on the Canopy label.

Tank Mixture with Preview

This tank mixture controls all weeds controlled by **Sharda Metolachlor 86.4EC** alone and by Preview alone. Refer to the **Sharda Metolachlor 86.4EC Applied Alone** section for weeds controlled by **Sharda Metolachlor 86.4EC** and to the Preview label for weeds controlled by Preview. Apply pre-plant incorporated or pre-emergence, using the appropriate rates from the **Sharda Metolachlor 86.4EC + Canopy-Soybeans** table.

Pre-Plant Incorporated: Apply within 2 weeks of planting. Uniformly incorporate into the top 1-2 inches of soil before planting soybeans.

Pre-Emergence: Apply after planting, but before soybeans emerge.

Note: Follow all use directions, varietal restrictions, limitations, precautions, information regarding application to soybeans, and rotational restrictions on the **Sharda Metolachlor 86.4EC** and Preview labels.

Sharda Metolachlor 86.4EC + Preview-Soybeans

SOIL TEXTURE	BROADCAST RATES PER ACRE	
	SHARDA METOLACHLOR 86.4EC + PREVIEW 75 DF	
0.5-3% Organic Matter Coarse Medium Fine	0.85 pt. + 6 oz.	
	1.0 pt. + 7 oz.	
	1.33 pts. + 8 oz.	
3-5% Organic Matter Coarse Medium Fine	1.0 pt. + 7 oz.	
	1.33 pts. + 8 oz.	
	1.33 - 1.67 pts. + 9 - 10 oz.	

Restriction:

- Do not apply to sand, or to any soil <0.5% organic matter, or to any soil with pH >6.8.

Tank Mixture with Command

Before making applications, read and strictly follow all use directions, limitations, precautions, information regarding application to soybeans, and rotational restrictions on the **Sharda Metolachlor 86.4EC** and Command labels.

This tank mixture controls all weeds controlled by **Sharda Metolachlor 86.4EC** alone and by Command alone. Refer to the **Sharda Metolachlor 86.4EC Applied Alone** section for weeds controlled by **Sharda Metolachlor 86.4EC** and to the Command label for weeds controlled by Command. Apply **Sharda Metolachlor 86.4EC** + Command pre-plant incorporated, using rates in the **Sharda Metolachlor 86.4EC + Command-Soybeans** table. Follow all Command application instructions as to incorporation interval, geographical location, equipment operation, soil moisture conditions, etc.

Sharda Metolachlor 86.4EC + Command-Soybeans

SOIL TEXTURE	BROADCAST RATES PER ACRE		
	SHARDA METOLACHLOR 86.4EC +	Command 4E	
		Northern Region	Southern Region
0.5 - 3% Organic Matter Coarse Medium Fine	0.85 pt.	1.5 - 2 pts.	2 - 2.5 pts.
	1.0 pt.		
	1.33 pts.		
>3% Organic Matter Coarse Medium Fine	1.0 pt.		
	1.33 pts.		
	1.33 - 1.67 pts.		

Tank Mixture with Sonalan

This tank mixture controls all weeds controlled by **Sharda Metolachlor 86.4EC** alone and by Sonalan alone. Refer to the **Sharda Metolachlor 86.4EC Applied Alone** section for weeds controlled by **Sharda Metolachlor 86.4EC** and to the Sonalan label for weeds controlled by Sonalan. Apply **Sharda Metolachlor 86.4EC** and Sonalan pre-plant incorporated using the appropriate rates from the **Sharda Metolachlor 86.4EC + Sonalan-Soybeans** table.

Pre-Plant Incorporated: Follow soil preparation procedures for Sonalan. Refer to the Sonalan/**Sharda Metolachlor 86.4EC** Tank Mixture label for incorporation specifications.

Sequential: Apply Sonalan alone pre-plant incorporated as specified on the Sonalan label. Follow with a pre-emergence application of **Sharda Metolachlor 86.4EC** during planting (behind the planter) or after planting but before weeds or soybeans emerge.

Sharda Metolachlor 86.4EC + Sonalan-Soybeans

Do not use on muck or peat with >20% organic matter.

SOIL TEXTURE	BROADCAST RATES PER ACRE	
	SHARDA METOLACHLOR 86.4EC + SONALAN	
<3% Organic Matter Coarse Medium* Fine	1.0 - 1.33 pts. + 1.25 - 2.0 pts.	
	1.33 - 1.67 pts. + 1.75 - 2.50 pts.	
	1.33 - 1.67 pts. + 2.25 - 3.0 pts.	
>3% Organic Matter Coarse Medium* Fine	1.33 pts. + 1.25 - 2.0 pts.	
	1.33 - 1.67 pts. + 1.75 - 2.50 pts.	
	1.67 - 2.0 pts. + 2.25 - 3.0 pts.	

*For eastern black nightshade on these soils, apply Sonalan at 3 pts./A on medium- and 3.5 pts./A on fine textured soils, and follow with 2 incorporation passes.

Follow all use directions, limitations, restrictions, precautions, and information regarding application to soybeans on the **Sharda Metolachlor 86.4EC** and Sonalan labels.

Tank Mixture with Pursuit

This tank mixture controls all weeds controlled by **Sharda Metolachlor 86.4EC** alone and by Pursuit alone. Refer to the **Sharda Metolachlor 86.4EC Applied Alone** section for weeds controlled by **Sharda Metolachlor 86.4EC** and to the Pursuit label for weeds controlled by Pursuit. Refer to the Pursuit label for geographical locations where this tank mixture may be applied.

Apply **Sharda Metolachlor 86.4EC** + Pursuit early pre-plant, pre-plant incorporated, or pre-emergence after planting using rates in the **Sharda Metolachlor 86.4EC + Pursuit-Soybeans** table. Application can be made in water or liquid fertilizer. Follow all use directions under Soil Applications on the Pursuit label. For early pre-plant and pre-plant incorporated applications, apply within 30 days before planting.

Note: Follow all use directions, limitations, precautions, information regarding application to soybeans, and rotational restrictions on the **Sharda Metolachlor 86.4EC** and Pursuit labels.

Sharda Metolachlor 86.4EC + Pursuit-Soybeans

SOIL TEXTURE	BROADCAST RATES PER ACRE	
	SHARDA METOLACHLOR 86.4EC + PURSUIT	
<3% Organic Matter Coarse Medium Fine	0.85 pt. + 0.25 pt.	
	1.0 pt. + 0.25 pt.	
	1.33 pts. + 0.25 pt.	
>3% Organic Matter Coarse Medium Fine	1.0 pts. + 0.25 pt.	
	1.33 pts. + 0.25 pt.	
	1.33 - 1.67 pts. + 0.25 pt.	

Sequential: Apply **Sharda Metolachlor 86.4EC** early pre-plant, pre-plant incorporated, or pre-emergence after planting at 0.85 pt./A on coarse soils and 1.0 pt./A on medium- and fine-textured soils. Follow with a sequential post-emergence application of Pursuit to control emerged weeds according to the Pursuit label. **Sharda Metolachlor 86.4EC** will improve the consistency and level of control from Pursuit on most grass species. Refer to the Pursuit post-emergence label for a listing of weeds controlled, application rate, and growth stage limitations.

Tank Mixture with Lexone, Sencor, Scepter, Lorox, Lorox Plus, Gemini, Canopy, Preview, or Pursuit, plus Gramoxone Extra or Roundup for Minimum-Tillage or No-Tillage Systems

In minimum-tillage or no-tillage systems where soybeans are planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, the contact herbicides Gramoxone Extra or Roundup may be added to a tank mix of either **Sharda Metolachlor 86.4EC** + Sencor or Lexone, **Sharda Metolachlor 86.4EC** + Scepter, **Sharda Metolachlor 86.4EC** + Lorox, **Sharda Metolachlor 86.4EC** + Lorox Plus, **Sharda Metolachlor 86.4EC** + Gemini, **Sharda Metolachlor 86.4EC** + Canopy, **Sharda Metolachlor 86.4EC** + Preview, or **Sharda Metolachlor 86.4EC** + Pursuit. When used as directed, the Gramoxone Extra portion of the tank mixture controls most emerged weeds and suppresses many perennial weeds. Roundup combinations will control emerged annual and perennial weeds when applied as directed on the Roundup label. The **Sharda Metolachlor 86.4EC** + Sencor / Lexone, Scepter, Lorox, Lorox Plus, Gemini, Canopy, Preview, or Pursuit portion of the tank mixture provides pre-emergence control of the weeds listed on this label in the tank mixture section for **Sharda Metolachlor 86.4EC** + Sencor / Lexone, **Sharda Metolachlor 86.4EC** + Scepter, **Sharda Metolachlor 86.4EC** + Lorox, **Sharda Metolachlor 86.4EC** + Lorox Plus, **Sharda Metolachlor 86.4EC** + Gemini, **Sharda Metolachlor 86.4EC** + Canopy, **Sharda Metolachlor 86.4EC** + Preview, and **Sharda Metolachlor 86.4EC** + Pursuit, respectively.

Refer to the label of each product used in combination and observe the planting details, soybean variety restrictions, information regarding application to soybeans, geographical restrictions, and all other precautions and limitations. Refer below for rates of Gramoxone Extra or Roundup, **Sharda Metolachlor 86.4EC** + Sencor / Lexone, **Sharda Metolachlor 86.4EC** + Scepter, **Sharda**

Metolachlor 86.4EC + Lorox, Sharda Metolachlor 86.4EC + Lorox Plus, Sharda Metolachlor 86.4EC + Gemini, Sharda Metolachlor 86.4EC + Canopy, Sharda Metolachlor 86.4EC + Preview, and Sharda Metolachlor 86.4EC + Pursuit, respectively.

Application: Apply before, during, or after planting, but before the soybeans emerge, at the rates specified below. Add Gramoxone Extra or Roundup at the following broadcast rates:

Gramoxone Extra:

Weeds 1-3": 1.5-2 pts./A

Weeds 3-6": 2-2.5 pts./A

Weeds 6": 2.5-3 pts./A

Apply surfactant at 1 or 2 pts./100 gals. of spray mixture with 75% or greater or 50-74% nonionic active ingredient, respectively. This treatment will not control weeds taller than 6".

Restriction: Do not apply combinations containing Gramoxone Extra in suspension type liquid fertilizers as the activity of paraquat will be reduced.

Roundup: See the Roundup or Roundup RT label for weeds controlled, rates, and other use directions. Apply in 20-60 gals. of water or fluid fertilizer per acre with ground equipment.

Sharda Metolachlor 86.4EC + Lexone / Sencor + Gramoxone Extra or Roundup

Loamy sand >2% organic matter: Apply 1.0 pt. / A of **Sharda Metolachlor 86.4EC** + 0.33 - 0.5 lb./A of Sencor or Lexone DF.

Medium soils: Apply 1.33 pts./A of **Sharda Metolachlor 86.4EC** + 0.5-0.67 lb./A of Sencor or Lexone DF.

Fine soils: Apply 1.33-1.67 pts./A of **Sharda Metolachlor 86.4EC** + 0.67 lb./A of Sencor or Lexone DF.

When using Sencor 4 or Lexone 4L, multiply lbs. of DF by 1.5 to get pts./A.

If heavy rain occurs soon after application, crop injury may result, especially in poorly drained areas where water stands for several days or where the seeding slit has not been properly closed.

Restriction:

- Do not use this tank mixture on soil with <0.5% organic matter, on alkaline soil with a pH >7.4, or on all sand and loamy sand with <2% organic matter.

Sharda Metolachlor 86.4EC + Scepter + Gramoxone Extra or Roundup

Coarse soils: Apply 1.0 pt./A of **Sharda Metolachlor 86.4EC** + 0.67 pt./A of Scepter.

Medium soils: Apply 1.33 pts./A of **Sharda Metolachlor 86.4EC** + 0.67 pt./A of Scepter.

Fine soils: Apply 1.67 pts. /A of **Sharda Metolachlor 86.4EC** + 0.67 pt./A of Scepter.

Restrictions:

- Do not apply within 90 days of harvest.
- Do not graze or feed treated soybean forage, hay, or straw to livestock.

Sharda Metolachlor 86.4EC + Lorox + Gramoxone Extra or Roundup

Coarse soils: Apply 1.0 pt./A of **Sharda Metolachlor 86.4EC** + 1-1.5 lbs./A of Lorox DF**.

Medium soils: Apply 1.33 pts./A of **Sharda Metolachlor 86.4EC** + 1-2 lbs./A of Lorox DF.

Fine soils: Apply 1.33-1.67 pts./A of **Sharda Metolachlor 86.4EC** + 2-3 lbs./A of Lorox DF.

Restrictions:

- Do not use on soil with <0.5% organic matter.
- Do not use on loamy sand except in the northeastern U.S.
- Do not use loamy sand with >1% organic matter.
- Do not use on sand, gravelly soils, or exposed subsoils.

**When using Lorox L or Lorox DF, use equivalent rates. One pt. of Lorox L equals 1.0 lb. of Lorox DF.

Sharda Metolachlor 86.4EC + Lorox Plus + Gramoxone Extra or Roundup

Use only soils with 0.5-3% organic matter. Do not apply to sand or to any soil with pH >6.8.

Coarse soils: Apply 1.0 pt./A of **Sharda Metolachlor 86.4EC** + 12-14 oz./A of Lorox Plus 60DF.

Medium soils: Apply 1.33 pts./A of **Sharda Metolachlor 86.4EC** + 14-16 oz./A of Lorox Plus.

Fine soils: Apply 1.33-1.67 pts./A of **Sharda Metolachlor 86.4EC** + 16-18 oz./A of Lorox Plus.

Sharda Metolachlor 86.4EC + Gemini + Gramoxone Extra or Roundup

Use only where soils have 0.5-3% organic matter. Do not apply to sand or loamy sand, or to any soil <0.5% organic matter, or to any soil with pH >7.0, except as specified on the Gemini label.

Coarse soils (sandy loam only): Apply 1.0 pt./A of **Sharda Metolachlor 86.4EC** + 12-16 oz./A of Gemini 60DF.

Medium soils: Apply 1.33 pts./A of **Sharda Metolachlor 86.4EC** + 16-20 oz./A of Gemini.
Fine soils: Apply 1.33-1.67 pts./A of **Sharda Metolachlor 86.4EC** + 20-24 oz./A of Gemini.

Sharda Metolachlor 86.4EC + Canopy + Gramoxone Extra or Roundup

Use only where soils have 0.5-5% organic matter. Do not apply to sand, or to any soil with <0.5% organic matter, or to any soil with pH >7.0, except as specified on the Canopy label. Refer to the Canopy label for appropriate rate according to geographical location, soil and organic matter classification, pH limitations, and all other use directions.

Coarse soils (except sand): Apply 1.0 pt./A of **Sharda Metolachlor 86.4EC**.

Medium soils: Apply 1.33 pts./A of **Sharda Metolachlor 86.4EC**.

Fine soils: Apply 1.33-1.67 pts./A of **Sharda Metolachlor 86.4EC**.

Sharda Metolachlor 86.4EC + Preview + Gramoxone Extra or Roundup

Use only where soils have 0.5-5% organic matter. Do not apply to sand, or to any soil with <0.5% organic matter, or to any soil with pH >6.8.

Coarse soils (except sand): Apply 1.0 pt./A of **Sharda Metolachlor 86.4EC** + 6* - 7 oz./A of Preview 75DF.

Medium soils: Apply 1.33 pts./A of **Sharda Metolachlor 86.4EC** + 7* - 8 oz./A of Preview.

Fine soils: Apply 1.33-1.67 pts./A of **Sharda Metolachlor 86.4EC** + 8* to 9 - 10 oz./A of Preview.

*Use this rate where the soil organic matter is 0.5-3.0% range.

Sharda Metolachlor 86.4EC + Pursuit + Gramoxone Extra or Roundup

Coarse soils: Apply 1.0 pt./A of **Sharda Metolachlor 86.4EC** + 0.25 pt./A of Pursuit.

Medium soils: Apply 1.33 pts./A of **Sharda Metolachlor 86.4EC** + 0.25 pt./A of Pursuit.

Fine soils: Apply 1.67 pts./A of **Sharda Metolachlor 86.4EC** + 0.25 pt./A of Pursuit.

Post-Emergence Applications

Tank Mixture with Glyphosate Products

Sharda Metolachlor 86.4EC at 1.0-1.33 pts./A may be tank mixed with glyphosate products at labeled rates and applied from emergence up through the 3rd - 5th trifoliolate leaf stage of Roundup Ready or glyphosate-tolerant soybeans. **Sharda Metolachlor 86.4EC** alone will not control emerged weeds. Use this treatment only on soybeans designated for use with glyphosate (e.g., Roundup Ready or glyphosate-tolerant soybeans). The glyphosate product must be registered for post-emergence use in Roundup Ready or glyphosate-tolerant soybeans.

Tank Mixture with Glufosinate Ammonium (Liberty) Products

Sharda Metolachlor 86.4EC at 1.0-1.33 pts./A may be tank mixed with glufosinate products at labeled rates and applied from emergence up through the 3rd - 5th trifoliolate leaf stage of soybeans. **Sharda Metolachlor 86.4EC** alone will not control emerged weeds. Use this treatment only on soybeans designated for use with glufosinate (e.g., Liberty Link). The use of adjuvants such as COC or UAN with **Sharda Metolachlor 86.4EC** may result in temporary crop injury.

Restrictions:

- Do not apply more than 1.33 pts./A post-emergence.
- Do not graze or feed treated forage or hay from soybeans to livestock following a post-emergence application.

Follow the tank mix product label for adjuvant instructions. Make post-emergence application at least 90 days before harvest.

TOMATOES

Transplanted Tomatoes: **Sharda Metolachlor 86.4EC** may be applied pre-plant incorporated or pre-plant before transplanting. If the latter method is used, keep soil disturbance to a minimum during transplanting. Application may also be made post-directed to transplants after the first settling rain or irrigation. When an application is made post-directed, apply in a minimum of 20 gallons of water per acre and minimum contact with tomato plants. **Sharda Metolachlor 86.4EC** will not control emerged weeds. In bedded transplanted tomatoes, apply **Sharda Metolachlor 86.4EC** pre-plant non-incorporated to the top of the pressed bed, as the last step, prior to laying plastic. **Sharda Metolachlor 86.4EC** may also be used to treat row-middles in bedded tomatoes, as long as the total amount of **Sharda Metolachlor 86.4EC** does not exceed the maximum allowed per crop.

Seeded Tomatoes: **Sharda Metolachlor 86.4EC** may be applied post-directed to direct seeded tomatoes. Tomato plants must be at least 4" tall at the time of application and the product must be applied in a minimum of 20 gallons of water per acre. Minimize spray contact with tomato plants. **Sharda Metolachlor 86.4EC** will not control emerged weeds.

Tomato Use Rates:

Coarse soils: Apply **Sharda Metolachlor 86.4EC** at 1.0-1.33 pts./A if organic matter content is <3% or 1.33 pts./A if the organic matter is >3%.

Medium soils: Apply **Sharda Metolachlor 86.4EC** at 1.33-1.67 pts./A.

Fine soils: Apply **Sharda Metolachlor 86.4EC** at 1.33-1.67 pts./A if organic matter content is <3% or 1.67-2.0 pts./A if the organic matter content is >3%. Apply by ground application only.

Precautions:

- **Sharda Metolachlor 86.4EC** may damage transplants that have been weakened by any cause. To prevent damage, plant only healthy transplants.
- In transplanted tomatoes, if **Sharda Metolachlor 86.4EC** is applied pre-plant incorporated, incorporate to a depth less than the depth of transplanting, and use the lower rate within the specified rate range for the given soil type, or damage may occur.
- For row middle applications where tomatoes are grown on sandy soils and where high soil moisture conditions can exist (i.e. low binding and high evaporation conditions), as may be found in the States of Florida, Georgia, Maryland, and Virginia, there is potential for crop injury in the form of leaf epinasty. The risk of this type of injury can be reduced by:
 - Incorporating the **Sharda Metolachlor 86.4EC** immediately following application.
 - Applying the **Sharda Metolachlor 86.4EC** seven or more days before transplanting (but only after the beds have been formed).
 - Minimizing the application of **Sharda Metolachlor 86.4EC** onto the plastic of the bed
 - Any combination of the above.

Restrictions:

- Do not apply **Sharda Metolachlor 86.4EC** within 90 days of tomato harvest.
- Do not exceed the maximum label rate for the soil texture per year.
- Do not apply more than 1 post-emergence application per year.
- Do not apply to varieties or cultivars with unknown tolerance to **Sharda Metolachlor 86.4EC**.
- Do not plant when wet, cool, or unfavorable growing conditions exist.

STORAGE AND DISPOSAL

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

Pesticide Storage: This product may be stored at temperatures down to 30°F below 0°F. Keep from freezing: DO NOT store below 32°F.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA region office for guidance.

Container Handling:

NONREFILLABLE CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS): 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 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. Offer for recycling, if available.

NONREFILLABLE CONTAINER (GREATER THAN 5 GALLONS): 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. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available.

REFILLABLE CONTAINER: Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

Bottom Discharge IBC (e.g., Schuetz Caged IBC or Snyder Square Stackable). Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g. Snyder 120 Next Gen, Bonar B120, Drums and Kegs).

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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Sharda USA LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal

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