



U.S. ENVIRONMENTAL PROTECTION AGENCY  
 Office of Pesticide Programs  
 Registration Division (7505P)  
 1200 Pennsylvania Ave., N.W.  
 Washington, D.C. 20460

**EPA Reg. Number:**

83529-95

**Date of Issuance:**

4/26/18

**NOTICE OF PESTICIDE:**

Registration  
 Reregistration  
 (under FIFRA, as amended)

**Term of Issuance:**

Conditional

**Name of Pesticide Product:**

SHARDA ATRAZINE 33% +  
 METOLACHLOR 26.1% SE

**Name and Address of Registrant (include ZIP Code):**

Sharda USA LLC  
 c/o Wagner Regulatory Associates  
 PO Box 640  
 Hockessin, DE 19707

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

**Signature of Approving Official:**

Reuben Baris, Product Manager 25  
 Herbicides Branch, Registration Division (7505P)

**Date:**

4/26/18

2. You are required to comply with the data requirements described in the DCI identified below:

a. Metolachlor GDCI-108801-1506

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: <http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1>

3. Make the following label changes before you release the product for shipment:

- Revise the EPA Registration Number to read, “EPA Reg. No. 83529-95.”

4. Submit one copy of the final printed label for the record before you release the product for shipment.

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

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 2/23/2018

If you have any questions, please contact Sarah Meadows by phone at 703-347-0505, or via email at [meadows.sarah@epa.gov](mailto:meadows.sarah@epa.gov).

Enclosure

**RESTRICTED USE PESTICIDE  
(GROUND AND SURFACE WATER CONCERNS)**

For retail sale to and use only by certified applicators or persons under their direct supervision, and only for those uses covered by the certified applicator's certification. This product is a restricted-use herbicide due to ground and surface water concerns. Users must read and follow all precautionary statements and instructions for use in order to minimize potential for atrazine to reach ground and surface water.

ATRAZINE	METOLACHLOR	GROUP	5	15	HERBICIDES
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## Sharda Atrazine 33% + Metolachlor 26.1% SE ABN: Mitra

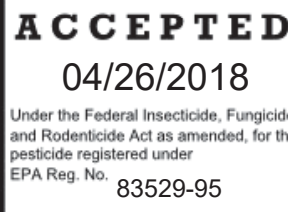
For Weed Control in Corn and Grain or Forage Sorghum

ACTIVE INGREDIENTS:	WT. BY %
*Atrazine .....	33.00%
Atrazine related compounds.....	0.62%
**Metolachlor .....	26.10%
<b>OTHER INGREDIENTS:</b> .....	<b>40.28%</b>
<b>TOTAL:</b> .....	<b>100.00%</b>

\*CAS No. 1912-24-9 - Contains 3.1 lbs. per U.S. gal. of the active ingredient atrazine

\*\*CAS No. 51218-45-2 - Contains 2.4 lbs. per U.S. gal. of the active ingredient metolachlor.

Sharda Atrazine 33% + Metolachlor 26.1% SE is formulated as a suspension emulsion (SE).



### KEEP OUT OF REACH OF CHILDREN CAUTION

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

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

#### HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at **1-800-222-1222**.

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

See Panel for First Aid Instructions and booklet for complete Precautionary Statements and Directions For Use.

See label booklet for complete Precautionary Statements, Directions For Use, and Storage and Disposal.

See label booklet for additional Precautionary Statements, Directions For Use, and Storage and Disposal.

See label booklet for complete Directions For Use.]

**Sale, use and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited.**

EPA Reg. No. 83529-OL

EPA Est. No. XXXXX-XX-XXX

Manufactured for:

**Sharda USA LLC** 

7217 Lancaster Pike, Suite A  
Hockessin, Delaware 19707

Net Contents: \_\_\_\_\_ [Gals./L.]

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
**CAUTION**

Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Mixers, loaders, applicators, flaggers, and other handlers not using engineering controls must wear:**

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing and loading, or exposed to the concentrate

**Mixers, loaders, applicators, and other handlers using engineering controls must wear:**

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves and apron for mixers and loaders

See the **ENGINEERING CONTROL STATEMENTS** for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

**ENGINEERING CONTROL STATEMENTS**

Pilots must use an enclosed cockpit in a manner that is consistent with the WPS for Agricultural Pesticides [40 CFR 170.240(d)(6)]. Pilots must wear the PPE required on this labeling for applicators, however, they need not wear chemical-resistant gloves when using an enclosed cockpit.

Flaggers supporting aerial applications must use an enclosed cab that meets the definition on the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection.

Mixers and loaders supporting aerial applications must use a closed system that meets the requirements for dermal protection listed in the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240(d)(4)] and must: wear the personal protective equipment required for mixers and loaders, wear protective eyewear if the system operates under pressure, and be provided and have immediately available for use in an emergency, such as a spill or equipment breakdown: chemical-resistant footwear.

When applicators use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(5)], 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**

This product is toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsate. This pesticide contains atrazine, which has been shown to be toxic to aquatic invertebrates. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply when weather conditions favor drift from treated areas.

**Groundwater Advisory**

**Sharda Atrazine 33% + Metolachlor 26.1% SE** contains both the active ingredients atrazine and metolachlor. Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in groundwater. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (groundwater) is close to the surface and where these soils are very permeable, i.e., well-drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

Metolachlor has the potential to leach through soil into groundwater under certain conditions as a result of agricultural use. 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 has the potential to 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 overlaying extremely shallow groundwater, 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 overlaying tile drainage systems that drain to surface water. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

**MIXING/LOADING INSTRUCTIONS**

Care must be taken when using this product to prevent back-siphoning into wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsates. Check-valves or anti-siphoning devices must be used on all mixing equipment.

This product must not be mixed/loaded or used within 50 ft. of all wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 ft. 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 the pad must be self-contained. The pad shall 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. Additional State imposed requirements regarding well-head setbacks and operational area containment must be observed.

This product must not be mixed or loaded within 50 ft. of perennial or intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be applied aerially or by ground within 66 ft. of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 ft. around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66 ft. buffer or setback from runoff entry points must be planted to crop, or seeded with grass or other suitable crop.

**Tile-Outletted Terraced Fields Containing Standpipes**

One of the following restrictions must be used in applying atrazine to tile-terraced fields containing standpipes:

1. Do not apply this product within 66 ft. of standpipes in tile-outletted terraced fields.
2. Apply this product to the entire tile-outletted terraced field and immediately incorporate it to a depth of 2-3 inches in the entire field.
3. Apply this product to the entire tile-outletted terraced field under a no-till practice only when a high crop residue management practice is practiced. High crop residue management is described as a crop management practice where little or no crop residue is removed from the field during and after crop harvest.

**DIRECTIONS FOR USE**

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

ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION OF FEDERAL LAW. Before using this product, you must consult the Atrazine Watershed Information Center (AWIC) to determine whether the use of this product is prohibited in your watershed. AWIC can be accessed through [www.atrazine-watershed.info](http://www.atrazine-watershed.info) or 1-866-365-3014. If use of this product is prohibited in your watershed, you may return this product to your point of purchase or contact Sharda USA LLC for a refund.

**Sharda Atrazine 33% + Metolachlor 26.1% SE** must be used only in accordance with use directions on this label or in separately published EPA accepted supplemental labeling for this product.

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.

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.**

**Sale, use and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited.**

**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-sleeve shirt and short pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposures

**PRODUCT INFORMATION**

**Sharda Atrazine 33% + Metolachlor 26.1% SE** is a selective herbicide for pre-plant, pre-emergence, or post-emergence control of labeled annual grasses and broadleaf weeds in corn. **Sharda Atrazine 33% + Metolachlor 26.1% SE** can also be used prior to crop emergence for control of labeled annual grasses and broadleaf weeds in grain or forage sorghum, provided the sorghum seed has been properly treated with Concep®. **Sharda Atrazine 33% + Metolachlor 26.1% SE** may be used in tank mix with other labeled herbicides for weed control in conventional, minimum-till, and no-till corn, grain sorghum, or forage sorghum.

**Restrictions:**

- Do not exceed an application rate of 2.0 pounds active ingredient of atrazine per acre for any single application.
- When tank mixing or making sequential applications of atrazine or products that contain atrazine to corn or sorghum, the total pounds of atrazine applied (lb. a.i. per acre) must not exceed 2.5 pounds active ingredient per acre per year.
- Do not make application of this product through any type of irrigation system.
- Do not make application under windy conditions or any conditions which favor runoff or wind erosion of soil containing this product to non-target areas.
- The combined amount of this product resulting from all applications to corn must not exceed a total of 3.23 qt./A per calendar year.
- The combined amount of this product resulting from all applications to sorghum must not exceed a total of 2.58 qt./A per calendar year.

**Precautions:**

- Avoid spray overlap, as crop injury may result.
- If sorghum seed is not properly pretreated with Concep®, **Sharda Atrazine 33% + Metolachlor 26.1% SE** will severely injure the crop.
- Injury may occur to sorghum following the use of **Sharda Atrazine 33% + Metolachlor 26.1% SE** under abnormally high soil moisture conditions during early development of the crop.
- 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 what is generally considered acceptable for commercial weed control.
- Dry weather after a pre-emergence application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** or a tank mixture may reduce effectiveness. Cultivate if weeds develop in conventional tillage corn or sorghum.
- Thoroughly clean sprayer or other application equipment before using. Dispose of cleaning solution in a responsible manner. Do not use a sprayer or application equipment contaminated with other materials, as crop damage or clogging of the application equipment may occur.
- To prevent off-site movement due to runoff or wind erosion:
  - Avoid treating powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.
  - Do not apply to impervious substrates, such as paved or highly compacted surfaces.
  - Do not use tailwater 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.

Through many years of continuous use of atrazine (one of the ingredients in **Sharda Atrazine 33% + Metolachlor 26.1% SE**), and products chemically related to atrazine, biotypes of some weeds listed on this label that are controlled by the atrazine component have been reported to develop resistance to this and chemically related herbicides. Where this is known or suspected, and weeds controlled by this product are expected to be present along with resistant biotypes, we recommend the use of **Sharda Atrazine 33% + Metolachlor 26.1% SE** in combination or in sequence with registered herbicides which do not contain triazines. Consult with your State Agricultural Extension Service for specific recommendations and see the **Resistance Management** section of this label for additional information.

Tank mixtures are permitted only in those states where the tank mix partner is registered. Refer to and follow the label of each tank

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

Application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** made alone or in tank mixture with AAtrex®, Balance®, Dual Magnum®, Dual II Magnum®, or Princep® may be made early pre-plant, pre-plant surface, pre-plant incorporated, or pre-emergence on corn, in water or fluid fertilizer. Make post-emergence treatments of **Sharda Atrazine 33% + Metolachlor 26.1% SE** to corn, alone or in combination, using water only as the carrier. Application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** may be made in tank mix combination with Gramoxone® brands, Landmaster® BW, Touchdown®, or Roundup® with or without the above herbicides pre-plant surface or pre-emergence to corn. Application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** alone may also be made on sorghum early pre-plant, pre-plant incorporated, pre-plant surface, or pre-emergence in water or in fluid fertilizer.

Application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** may be made in water by aircraft. Make applications in fluid fertilizer only by ground equipment.

#### WEED RESISTANCE MANAGEMENT

**Sharda Atrazine 33% + Metolachlor 26.1% SE** contains two active ingredients, atrazine and metolachlor. Atrazine is classified as a Group 5 herbicide (triazine chemical family) and is an inhibitor of photosynthesis at photosystem II site A. Metolachlor is classified as a Group 15 herbicide (chloroacetamide chemical family) and is a mitosis inhibitor.

Herbicide resistance is defined as the inherited ability of a plant to survive and reproduce following exposure to a dose of herbicide normally lethal to the wild type. In a plant, resistance may be naturally occurring or induced by such techniques as genetic engineering or selection of variants produced by tissue culture or mutagenesis. Any weed population may contain or develop plants that are naturally resistant to **Sharda Atrazine 33% + Metolachlor 26.1% SE** and other Group 5 or Group 15 herbicides. Weed species with acquired resistance to Group 5 or Group 15 herbicides may eventually dominate the weed population if Group 5 or Group 15 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by **Sharda Atrazine 33% + Metolachlor 26.1% SE** or other Group 5 or Group 15 herbicides.

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

To delay herbicide resistance, consider:

- Avoiding the consecutive use of **Sharda Atrazine 33% + Metolachlor 26.1% SE** or other target site of action Group 5 or Group 15 herbicides that have a similar target site of action, on the same weed species.
- Using tank mixtures or premixes with herbicides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action, and are both effective at the tank mix or prepack rate on the weed(s) of concern.
- Basing herbicide use on a comprehensive Integrated Pest Management (IPM) program.
- Monitoring treated weed populations for loss of field efficacy.

Users should scout before and after application. Users should report lack of performance to registrant or their representative.

Contact your local sales representative, extension agent, or certified crop advisors to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of action for each target weed.

#### SOIL TEXTURE INFORMATION

On relatively coarse-textured soil or soil low in organic matter, use the lower rate listed within the rate ranges in all tables on this label; use the higher listed rate on relatively fine-textured soil or soil high in organic matter.

**Directions are based upon soil textures, which are defined as follows:**

**Coarse** - Sand, loamy sand, sandy loam

**Medium** - Loam, silt loam, silt

**Fine** - Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay

#### SHARDA ATRAZINE 33% + METOLACHLOR 26.1% SE APPLIED ALONE – CORN (ALL TYPES), GRAIN SORGHUM, OR FORAGE SORGHUM

<p><b>Weeds Controlled or Partially Controlled by Early Pre-Plant, Pre-Plant Surface-Applied, Pre-Plant Incorporated, or Pre-Emergence Applications of Sharda Atrazine 33% + Metolachlor 26.1% SE</b></p>
<p><b>Weeds Controlled</b></p>

Barnyardgrass (Watergrass)	Galinsoga	Pigweed
Carpetweed	Goosegrass	Purslane, Common
Chickweed	Henbit	Pusley, Florida
Cocklebur*	Jimsonweed	Ragweed, Common
Crabgrass	Lambsquarters	Ragweed, Giant*
Crowfootgrass	Morningglory	Rice, Red
Cupgrass, Prairie	Mustards	Signalgrass ( <i>Brachiaria</i> )*
Cupgrass, Southwestern	Nightshades	Smartweed
Foxtail, Giant	Nutsedge, Yellow*	Velvetleaf*
Foxtail, Green	Panicum, Browntop	Waterhemp
Foxtail, Millet	Panicum, Fall	Witchgrass
Foxtail, Yellow		
<b>Weeds Partially Controlled**</b>		
Cupgrass, Woolly	Sandbur	Sicklepod
Johnsongrass, Seedling	Shattercane	Sorghum, Volunteer
<p>*Control of these weeds can be erratic, especially under dry weather conditions. Control weeds that have escaped with cultivation or application of an labeled post-emergence herbicide. Only partial control can be expected on fine-textured soils.</p> <p>**Control may be improved by following these best practice procedures:</p> <ol style="list-style-type: none"> <li>1. <b>In corn</b>, make application up to the maximum single application rate in Table 1 for given soil texture and rate limitation based on soil conservation practices.</li> <li>2. <b>Thoroughly till moist soil</b> to destroy germinating and emerged weeds. If <b>Sharda Atrazine 33% + Metolachlor 26.1% SE</b> is to be applied pre-plant incorporated, this tillage may be used to incorporate <b>Sharda Atrazine 33% + Metolachlor 26.1% SE</b> if uniform 2-inch incorporation is achieved as directed under <b>Application Procedures</b>.</li> <li>3. Plant crop into moist soil <b>immediately after tillage</b>. If <b>Sharda Atrazine 33% + Metolachlor 26.1% SE</b> is to be used pre-emergence, make application at-planting or immediately after planting.</li> <li>4. If available, <b>sprinkler irrigate</b> within 2 days after application. Apply ½ - 1 inch of water. Use lower water volume (½ inch) on coarse-textured soils and higher volume (1 inch) on fine-textured soils.</li> <li>5. If irrigation is not possible and rain does not occur within 2 days after planting and application, weed control may be decreased. Under these conditions, a uniform, shallow cultivation should be made as soon as weeds emerge.</li> </ol>		

#### Sharda Atrazine 33% + Metolachlor 26.1% SE Rate Limitations – Corn and Sorghum\*

\*Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or greater setbacks) which are different from the label, the more restrictive/protective requirements must be followed. Certain states may have established rate limitations 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.

**Note:** For purposes of calculating total atrazine active ingredient applied, **Sharda Atrazine 33% + Metolachlor 26.1% SE** contains 3.1 lbs. a.i. atrazine per gal. (0.775 lbs. a.i./qt.). For the purposes of calculating the total metolachlor active ingredient applied, **Sharda Atrazine 33% + Metolachlor 26.1% SE** contains 2.4 lbs. a.i. metolachlor per gal. (0.6 lbs. a.i./qt.).

#### ATRAZINE USE RESTRICTIONS

**Sharda Atrazine 33% + Metolachlor 26.1% SE** contains both atrazine and metolachlor as active ingredients.

- **FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE:**

- **On Highly Erodible Land (as defined by the Natural Resource Conservation Service)**

If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at-planting, apply a maximum of 2.58 qts./acre of **Sharda Atrazine 33% + Metolachlor 26.1% SE** (2.0 lbs. a.i./A atrazine and 1.5 lbs. a.i./A metolachlor) as a broadcast spray. Refer to “B” in tables following.

If the soil coverage with plant residue is less than 30% at-planting, a maximum of 2.1 qts./acre of **Sharda Atrazine 33% + Metolachlor 26.1% SE** (1.6 lbs. a.i./A atrazine and 1.3 lbs. a.i./A metolachlor) may be applied. Refer to “A” in tables following.

- **On Land Not Highly Erodible:** Apply a maximum of 2.58 qt./acre of **Sharda Atrazine 33% + Metolachlor 26.1% SE** (2.0 lbs. a.i./A atrazine and 1.5 lbs. a.i./A metolachlor) as a broadcast spray. Refer to “B” in tables following.

- **FOR POST-EMERGENCE APPLICATION OF ATRAZINE TO CORN:**

- If atrazine was not applied before corn emergence, apply a maximum of 2.58 qts./acre of **Sharda Atrazine 33% + Metolachlor 26.1% SE** (2.0 lbs. a.i./A atrazine and 1.5 lbs. a.i./A metolachlor) broadcast. If a post-emergence treatment is required following an earlier atrazine application, the total atrazine applied may not exceed 2.5 lbs. active ingredient (3.2 qts. of **Sharda Atrazine 33% + Metolachlor 26.1% SE**) per acre per calendar year.

#### METOLACHLOR USE RESTRICTIONS

- If other products containing metolachlor have been applied, the combined total amount of metolachlor resulting from all applications must not exceed 3.75 lb per acre per calendar year to corn and 1.7 lb per acre per calendar year to sorghum.



**ROTATIONAL CROPS****Restrictions:**

- If treated crop is lost due to poor germination, hail, flood, insects, etc., corn may be replanted immediately or sorghum may be replanted immediately, provided the seed has been properly treated with Concep. Do not make a second broadcast application to replanted crops. If the original application was banded and the second crop is planted in the untreated row middles, a second banded treatment may be applied.
- Do not rotate to food or feed crops other than corn, sorghum, soybeans, cotton, or peanuts which may be planted the spring following treatment.
- Do not graze or feed forage or fodder from cotton to livestock.
- In eastern parts of the Dakotas, KS, western MN, and NE, do not rotate to soybeans for 18 months following application if the rate applied to corn or sorghum was more than 2.0 lbs. a.i. of atrazine or equivalent band application rate, or soybean injury may occur.
- If applied after June 10<sup>th</sup>, do not rotate with crops other than corn or sorghum the next year, or crop injury may occur.
- In the High Plains and Intermountain areas of the West, where rainfall is sparse and erratic or where irrigation is required, do not use unless corn or sorghum is to follow corn or sorghum, or a crop of untreated corn or sorghum is to precede other rotational crops.
- Do not plant sugar beets, tobacco, vegetables (including dry beans), spring-seeded small grains, or small-seeded legumes the year following application, or injury may occur.

**Precaution:**

- Injury may occur to soybeans planted the year following application on soils having a calcareous surface layer.

**APPLICATION PROCEDURES****Early Pre-Plant (Corn)**

Use on medium- and fine-textured soils with minimum-tillage or no-tillage systems in CO, IA, IL, IN, KS, KY, MN, MO, MT, ND, NE, SD, TN, WI, and WY. Apply  $\frac{3}{8}$  the labeled rate of **Sharda Atrazine 33% + Metolachlor 26.1% SE** as a split treatment 30-45 days prior to planting and the remainder at-planting, using the rates in Table 1. Applications made less than 30 days before planting may be as either a split or single treatment. Use the lower listed rate for light expected weed infestations and the higher listed rate for heavy expected weed infestations. On coarse-textured soils, make application of 2.1 qts./acre (1.6 lbs. a.i./A atrazine and 1.3 lbs. a.i./A metolachlor) of **Sharda Atrazine 33% + Metolachlor 26.1% SE** not more than 2 weeks before planting. The above procedure may be followed if AAtrex, Dual Magnum, Dual II Magnum, or Princep is used in tank mixtures with **Sharda Atrazine 33% + Metolachlor 26.1% SE**. Tank mixtures with Balance may be applied up to 14 days before planting field corn. Substitute a fluid fertilizer for some or all of the water carrier for burndown of existing annual weeds listed on this label up to the 2-leaf stage of development. The addition of crop oil concentrate to the spray mixture will enhance the burndown activity. If larger weeds are present at the time of treatment, apply in a tank mixture combination with a contact herbicide (for example, Gramoxone brands, Touchdown, or Roundup). Observe directions for use, precautions, and restrictions on the label of the contact herbicide. When tank mixing atrazine containing products, do not exceed 2.0 lbs. a.i./acre of atrazine as a pre- or post-application or 2.5 lbs. a.i./acre as the total of pre plus post applications per calendar year.

On medium- and fine-textured soils with minimum- or no-tillage systems in DE, MD, MI, NY, OH, PA, VA, and WV, early pre-plant applications may be applied following the directions for use above. If the amount of rainfall results in unsatisfactory length of weed control following the earlier treatment, a post-emergence application of an appropriately labeled broadleaf and/or grass weed herbicide may be used, i.e., AAtrex, Beacon<sup>®</sup>, Basagran<sup>®</sup>, 2,4-D, Banvel, Bucril<sup>®</sup>, or Marksman<sup>®</sup>.

**Cover Crops (Wheat):**

**Sharda Atrazine 33% + Metolachlor 26.1% SE** may be used according to the above directions to control winter wheat planted as a cover crop in IN, KY, and OH, in addition to providing residual weed control. The wheat must be less than 6 inches tall (preferably still in a dormant or semi-dormant state coming out of winter) at the time of treatment. Depending on rainfall, 10-20 days may be required to completely kill the wheat. In the event that adequate rainfall does not occur, control of the winter wheat may be unsatisfactory and application of a contact herbicide (i.e., Gramoxone brands, Touchdown brands, or Roundup brands) may be required prior to planting the crop.

Application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** may be made in the fall, as a single application, for control of the winter weeds listed on this label within the eco-fallow (no-till) production areas of NE and KS where wheat (or other small grain cereals) will be rotated to corn. The application must be made to untilled wheat stubble in the fall following wheat harvest, but before soil freeze-up. The ground must remain untilled through the establishment of the corn crop.

On medium- and fine-textured soils following final seedbed preparation in the Blacklands and Gulf Coast areas of TX, an early pre-plant treatment of **Sharda Atrazine 33% + Metolachlor 26.1% SE** at 1.6-1.9 qts./acre (1.2 lbs. a.i./A atrazine and 1.0 lbs. a.i./A metolachlor to 1.5 lbs. a.i./A atrazine and 1.1 lbs. a.i./A metolachlor) may be made 30-45 days prior to planting. Grass suppression of 2-3 weeks after planting can be expected as a result of this application. Do not incorporate or disturb the soil before planting, and avoid moving the soil during the planting operation. A follow-up application of Dual Magnum, or Dual II Magnum may be needed in fields with a history of heavy grass pressure. Apply after planting, but before corn and grass weeds emerge.

**Restrictions:**

- If the post-emergence treatment includes the herbicide used early pre-plant, do not exceed the labeled rate for corn on a given

soil texture. Observe all directions for use, precautions, and limitations on the label of the post-emergence herbicide.

- On medium- or fine- textured soils: do not exceed a total of 1.6 lbs. a.i. of metolachlor per acre if a follow-up application of metolachlor is needed, including the pre-plant **Sharda Atrazine 33% + Metolachlor 26.1% SE** application.
- On fine-textured soils with more than 3% organic matter, do not exceed a total of 1.9 lbs. a.i. of metolachlor per acre if a follow-up application of metolachlor is needed, including the pre-plant **Sharda Atrazine 33% + Metolachlor 26.1% SE** application.

**Precaution:**

- 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.

**Table 1: Sharda Atrazine 33% + Metolachlor 26.1% SE – Early Pre-Plant – Corn**

Soil Texture	Single Application (Quarts per Acre)	Split Application* (Quarts per Acre)	
		30 - 45 Days Before Planting	At-Planting
<b>COARSE</b> Sand, loamy sand, sandy loam	2.1	Do Not Apply.	
<b>MEDIUM</b> Loam, silt loam, silt	2.1 <sup>A</sup>	1.4 <sup>A</sup>	0.7 <sup>A</sup>
	2.1 - 2.58 <sup>B</sup>	1.4 - 1.75 <sup>B</sup>	0.7 - 0.9 <sup>B</sup>
<b>FINE</b> Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1 <sup>A</sup>	1.4 <sup>A</sup>	0.7 <sup>A</sup>
	2.58 <sup>B</sup>	1.75 <sup>B</sup>	0.9 <sup>B</sup>

\*Split applications can be made less than 30 days prior to planting if desired.

**A.** Do not exceed this rate on highly erodible land with less than 30% plant residue cover. Control of certain weeds may be reduced and a tank mix partner or an application of a post-emergence herbicide may be needed.

**B.** Use these rates for all other applications.

**Early Pre-Plant (Sorghum-Seed Treated with Concep):** For minimum-tillage and no-tillage systems only, application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** may be made up to 45 days before planting grain sorghum in IA, IL, eastern KS, MO, NE, and SD, using the rates in Table 2. Use only split applications for treatments made 30-45 days before planting with  $\frac{2}{3}$  the recommended rate applied initially and the remaining  $\frac{1}{3}$  at-planting. Applications made less than 30 days before planting may be made as either a split or single application.

Substitute a fluid fertilizer for some or all of the water carrier for burndown of existing annual weeds listed on this label up to the 2-leaf stage of development. The addition of crop oil concentrate to the spray mixture will enhance the burndown activity. If larger weeds are present at the time of treatment, make application in a tank mixture combination with a contact herbicide (for example, Gramoxone brands, Landmaster BW, Touchdown brands, or Roundup brands). Observe directions for use, precautions, and restrictions on the label of the contact herbicide. Under dry conditions, irrigation after application is recommended to move **Sharda Atrazine 33% + Metolachlor 26.1% SE** into the soil.

**Note:** 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.

On medium- and fine-textured soils following final seedbed preparation in the Blacklands, Panhandle, and Gulf Coast areas of TX, an early pre-plant application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** at 1.6-1.9 qts./acre (1.2 lbs. a.i./A atrazine and 1.0 lbs. a.i./A metolachlor to 1.5 lbs. a.i./A atrazine and 1.1 lbs. a.i./A metolachlor) may be made 30-45 days before planting. Grass suppression of 2-3 weeks after planting can be expected as a result of this application. Do not incorporate or disturb the soil before planting, and avoid moving the soil during the planting operation. A follow-up application of a Dual Magnum, or Dual II Magnum product may be needed in fields with a history of heavy grass pressure. Apply after planting, but before sorghum and grass weeds emerge.

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

**Restrictions:**

1. Do not use on soils with a pH greater than 8.0 if grain sorghum is to be planted.
2. Do not use on coarse soils. Do not use on medium soils with less than 1.0% organic matter.
3. On medium-textured soils, do not exceed a total of 1.4 lbs. of metolachlor a.i. per acre if a follow-up application of a metolachlor is needed, including the early pre-plant **Sharda Atrazine 33% + Metolachlor 26.1% SE** application.
4. On fine-textured soils, do not exceed 1.6 lbs. of metolachlor a.i. per acre, including the early pre-plant **Sharda Atrazine 33% + Metolachlor 26.1% SE** application.

**Table 2: Sharda Atrazine 33% + Metolachlor 26.1% SE – Early Pre-Plant – Grain or Forage Sorghum (Seed treated with Concep®)**

Soil Texture	Organic Matter Content	Single Application (Quarts per Acre)	Split Application* (Quarts per Acre)	
			30 - 45 Days Before Planting	At-Planting
<b>COARSE</b>	Any Level	Do Not Use.	Do Not Use.	

Sand, loamy sand, sandy loam				
<b>MEDIUM</b> Loam, silt loam, silt	more than 1.0% <sup>A</sup>	2.1 <sup>A</sup>	1.4 <sup>A</sup>	0.7 <sup>A</sup>
	less than 1.0% <sup>B</sup>	Do Not Use. <sup>B</sup>	Do Not Use. <sup>B</sup>	
<b>FINE</b> Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	more than 1.0% <sup>B</sup>	2.1 - 2.33 <sup>B</sup>	1.4 - 1.6 <sup>B</sup>	0.7 - 0.8 <sup>B</sup>
	more than 1.0% <sup>A</sup>	2.1 <sup>A</sup>	1.4 <sup>A</sup>	0.7 <sup>A</sup>
	1.0% - 1.5% <sup>B</sup>	2.1 - 2.33 <sup>B</sup>	1.4 - 1.6 <sup>B</sup>	0.7 - 0.8 <sup>B</sup>
	more than 1.5% <sup>B</sup>	2.33 - 2.58 <sup>B</sup>	1.6 - 1.75 <sup>B</sup>	0.8 - 0.9 <sup>B</sup>
*Split applications can be made less than 30 days before planting if desired.				
<b>A.</b> Do not exceed this rate on highly erodible land with less than 30% plant residue cover. Control of certain weeds may be reduced and a tank mix partner or an application of a post-emergence herbicide may be needed.				
<b>B.</b> Use these rates for all other applications.				

**Pre-Plant Surface, Pre-Plant Incorporated, or Pre-Emergence (Corn or Sorghum-Seed Treated with Concep):** Make application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** pre-plant surface, pre-plant incorporated, or pre-emergence, using the appropriate rates from Table 3 for corn, or from Table 4 for sorghum.

**Pre-Plant Surface:** Make a uniform application to the soil surface within 14 days before planting. Where applications are made to coarse soils more than 7 days before planting, use the rates in Table 1 for corn.

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

**Pre-Emergence:** Make application to the soil surface at-planting (behind the planter) or after planting, but before weeds or crop emerge.

**Table 3: Sharda Atrazine 33% + Metolachlor 26.1% SE – Pre-Plant Surface, Pre-Plant Incorporated, or Pre-Emergence – Corn**

Soil Texture	Broadcast Rate Quarts per Acre	
	Less Than 3% Organic Matter	3% Organic Matter or Greater
<b>COARSE</b> Sand, loamy sand, sandy loam	1.3	1.6
<b>MEDIUM</b> Loam, silt loam, silt	1.6	2.1
<b>FINE</b> Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1	2.1 <sup>A</sup>
		2.1 - 2.58* <sup>B</sup>
<b>Muck or peat soils</b> (more than 20% organic matter)	Do Not Use.	
*For cocklebur, yellow nutsedge, and velvetleaf control on fine-textured soils above 3% organic matter: Apply 2.58 qts. of <b>Sharda Atrazine 33% + Metolachlor 26.1% SE</b> per acre.		
<b>A.</b> Do not exceed this rate on highly erodible land with less than 30% plant residue cover. Control of certain weeds may be reduced and a tank mix partner or an application of a post-emergence herbicide may be needed.		
<b>B.</b> Use this rate for all other applications.		

**Note:** Substitute a fluid fertilizer for some or all of the water carrier for burndown of existing annual weeds listed on this label up to the 2-leaf stage of development. The addition of crop oil concentrate to the spray mixture will enhance the burndown activity. If larger weeds are present, add a contact herbicide as listed in the **Sharda Atrazine 33% + Metolachlor 26.1% SE Combinations** section of this label.

- In the event of escape of annual weeds following an early pre-plant, pre-plant surface, pre-plant incorporated, or pre-emergence treatment of **Sharda Atrazine 33% + Metolachlor 26.1% SE** applied alone or in combination, follow with a post-emergence application of an appropriately labeled broadleaf and/or grass weed herbicide, i.e., AAtrex, Accent®, Banvel, Basagran, Beacon, Buctril, Marksman, or 2,4-D. If the post-emergence treatment includes the herbicide used in the earlier treatment, do not exceed the labeled rate for corn on a given soil texture.
- Buctril may be applied post-emergence alone or in tank mix combination with AAtrex. Do not exceed 1.2 lbs. a.i./acre of AAtrex in tank mix combination with Buctril post-emergence. Refer to the AAtrex and Buctril labels for specific rates and precautions.
- If AAtrex or another product containing atrazine is used post-emergence following application of **Sharda Atrazine 33% + Metolachlor 26.1% SE**, do not exceed a pre-emergent plus post-emergent application total of 2.5 lbs. a.i./acre of atrazine per year on a corn crop.

**Table 4: Sharda Atrazine 33% + Metolachlor 26.1% SE – Pre-Plant Surface, Pre-Plant Incorporated, or Pre-Emergence – Grain or Forage Sorghum\* (Seed treated with Concep®)**

Soil Texture	Organic Matter	Broadcast Rate Quart per Acre
<b>COARSE</b>	Any Level	Do Not Use.

Sand, loamy sand, sandy loam		
<b>MEDIUM and FINE</b>	less than 1.0%	Do Not Use.
Loam, silt loam, silt, sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	more than 1.0%	1.6 - 2.1

**\*Restrictions:** Do not use in NM or TX, except in the TX Panhandle, Gulf Coast, and Blacklands areas. Do not make a pre-plant incorporated application in AZ or the Imperial Valley of CA.

**Note:** Substitute a fluid fertilizer for some or all of the water carrier for burndown of existing annual weeds listed on this label up to the 2-leaf stage of development. The addition of crop oil concentrate to the spray mixture will enhance the burndown activity. If larger weeds are present at the time of treatment, add a contact herbicide as listed in the **Sharda Atrazine 33% + Metolachlor 26.1% SE Combinations** section of this label.

**Precautions:**

- To avoid possible crop injury:
  - Do not make application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** on highly alkaline soils (pH greater than 8.0) or on eroded areas where calcareous subsoils are exposed.
  - Do not make application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** when sorghum is planted in deep furrows because heavy rains following application can cause excessive concentrations of herbicide in the furrow.
  - Do not make application to sorghum grown under dry mulch tillage.
  - Injury may occur if both **Sharda Atrazine 33% + Metolachlor 26.1% SE** applied early pre-plant, pre-plant surface, pre-plant incorporated, or pre-emergence and an at-planting systemic insecticide applied in-furrow are used.
  - In addition, sorghum growing under stress caused by minor element deficiency may be injured by **Sharda Atrazine 33% + Metolachlor 26.1% SE**.

**Restrictions:**

- Pre-Harvest Interval (PHI): Do not graze or feed sorghum forage for 60 days following pre-emergent use.
- Preharvest Interval (PHI): Do not harvest grain sorghum from treated areas for 75 days following **Sharda Atrazine 33% + Metolachlor 26.1% SE** application.

Weeds Controlled or Partially Controlled by Post-Emergence Broadcast Applications of Sharda Atrazine 33% + Metolachlor 26.1% SE		
Weeds Controlled		
Barnyardgrass (Watergrass)	Foxtail, Yellow	Pigweed
Cocklebur	Jimsonweed	Prickly Sida
Crabgrass	Kochia	Purslane
Crowfootgrass	Lambsquarters	Ragweed, Common
Flixweed	Morningglory	Smartweed
Foxtail, Giant	Mustards	Velvetleaf*
Foxtail, Green	Panicum, Fall	Waterhemp
Weeds Partially Controlled		
Nutsedge, Yellow		

**Application:** Make an early post-emergence application, using the specified rate from Table 5. Make application prior to grass and broadleaf weeds passing the 2-leaf stage and before corn exceeds 12" in height. Application to weeds larger than the 2-leaf stage will typically result in unsatisfactory control. Occasional corn leaf burn may result, but this should not affect later growth or yield.

**Restrictions:**

- Do not make application post-emergence in fluid fertilizer.
- Pre-Harvest Interval (PHI): Do not graze or feed field corn forage from treated areas for 60 days or sweet corn forage for 45 days following application.
- Pre-Harvest Interval (PHI): Do not harvest sweet corn ears from treated areas for 30 days following application.

**Table 5: Sharda Atrazine 33% + Metolachlor 26.1% SE Post-Emergence Broadcast – Corn**

Soil Texture	Broadcast Rate Quarts per Acre
<b>COARSE</b> Sand, loamy sand, sandy loam	1.6
<b>MEDIUM</b> Loam, silt loam, silt	2.1
<b>FINE</b> Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1 - 2.58*

\*For better residual control of cocklebur, velvetleaf, and yellow nutsedge on fine-textured soils above 3% organic matter, make application of 2.58 qts. of **Sharda Atrazine 33% + Metolachlor 26.1% SE** per acre.

**Restrictions:**

- Do not exceed a total of 3.23 qts./acre of (2.5 lbs. a.i./A atrazine and 1.9 lbs. a.i./A metolachlor) **Sharda Atrazine 33% + Metolachlor 26.1% SE** on a corn crop if application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** has been made early pre-

plant, pre-plant surface, pre-plant incorporated, or pre-emergence.

- For a **Sharda Atrazine 33% + Metolachlor 26.1% SE** early post application, do not exceed a total of 2.5 lbs. of active ingredient atrazine per calendar year if AAtrex (atrazine) or AAtrex plus Dual Magnum or Dual II Magnum tank mixtures have been applied early pre-plant, pre-plant surface, pre-plant incorporated, or pre-emergence.
- For a **Sharda Atrazine 33% + Metolachlor 26.1% SE** early post application, do not exceed a total of 3.75 lbs. of the active ingredient metolachlor if Dual Magnum or Dual II Magnum tank mixtures have been applied.

**Rotational Crops:** Follow the preceding crop rotation instructions for **Sharda Atrazine 33% + Metolachlor 26.1% SE – Early Pre-Plant, Pre-Plant Surface-Applied, Pre-Plant Incorporated, or Pre-Emergence.**

#### Post-Emergence-Directed – Corn

Application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** may be made at 1.3-2.58 qts./acre (1.0 lbs. a.i./A atrazine and 0.8 lbs. a.i./A metolachlor to 2.0 lbs. a.i./A atrazine and 1.5 lbs. a.i./A metolachlor) in a minimum of 15 gals. of water as a post-emergence-directed treatment to corn to extend control of weeds listed in the **Early Pre-Plant, Pre-Plant Surface-Applied, Pre-Plant Incorporated, Pre-Emergence, or Post-Emergence Broadcast** section of this label. Make application using the appropriate rate from Table 6.

For best results, make application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** to weed-free soil following use of a pre-plant surface, pre-plant incorporated, or pre-emergence herbicide, or following a lay-by cultivation. If weeds have emerged at the time of **Sharda Atrazine 33% + Metolachlor 26.1% SE** treatment, make application before grass and broadleaf weeds exceed the 2-leaf stage. Application to weeds larger than the 2-leaf stage will typically give unsatisfactory control. Make application to corn that is not taller than 12" in height. Minimize contact with corn leaves. Do not make application post-emergence in fluid fertilizer, or severe crop injury may occur.

#### Restrictions:

- Pre-Harvest Interval (PHI): Do not graze or feed field corn forage from treated areas for 60 days or sweet corn forage for 45 days following application.
- Pre-Harvest Interval (PHI): Do not harvest sweet corn ears from treated areas for 30 days following application.

**Table 6: Post-Emergence-Directed – Corn**

Soil Texture	Broadcast Rate Quarts per Acre
<b>COARSE</b> Sand, loamy sand, sandy loam	1.3
<b>MEDIUM</b> Loam, silt loam, silt	2.1
<b>FINE</b> Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1 - 2.58*
*For better residual control of cocklebur, velvetleaf, and yellow nutsedge on fine-textured soils above 3% organic matter, make application of 2.58 qts. of <b>Sharda Atrazine 33% + Metolachlor 26.1% SE</b> per acre.	

#### Restrictions:

- If application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** has been made early pre-plant, pre-plant surface, pre-plant incorporated, or pre-emergence, do not exceed a total of 3.23 qts./acre (2.5 lbs. a.i./A atrazine and 1.9 lbs. a.i./A metolachlor) of **Sharda Atrazine 33% + Metolachlor 26.1% SE** on a corn crop.
- If AAtrex (atrazine) or AAtrex plus Dual Magnum, or Dual II Magnum tank mixtures have been applied pre-plant surface, pre-plant incorporated, or pre-emergence, the **Sharda Atrazine 33% + Metolachlor 26.1% SE** post-directed application must not exceed a total of 2.5 lbs. of the active ingredient atrazine per calendar year. If Dual Magnum or Dual II Magnum tank mixtures have been applied, the **Sharda Atrazine 33% + Metolachlor 26.1% SE** post-directed application must not exceed a total of 3.75 lbs. of the active ingredient metolachlor.

#### SPRAY EQUIPMENT

**Ground Application:** Use sprayers that provide accurate and uniform application. Screens in nozzles and in suction and in-line strainers should be no finer than 50-mesh. Use a pump with capacity to: (1) maintain 35-40 psi at the nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension. Unless otherwise specified, use a minimum of 10 gals. of spray mixture per acre. Rinse sprayer thoroughly with clean water immediately after use.

For band applications, calculate amount to be applied per acre as follows:

$$\frac{\text{Band Width in Inches}}{\text{Row Width in Inches}} \times \text{Broadcast Rate per Acre} = \text{Amount Needed per Acre of Field}$$

**Low Carrier Application (Broadcast Ground Application Only):** Use sprayers, such as Ag-Chem RoGator®, Hagie, John Deere Hi-Cycle™, John Deere 4700 Sprayer, 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 should 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: (1) maintain up to 35-40 psi at the nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension. Use a minimum of 5.0 gals. of spray mixture per acre. Maximum

recommended sprayer speed is 15 mph. Maintain uniform travel speed while spraying. Rinse sprayer thoroughly with clean water immediately after each use.

**Note:** Low pressure nozzles are recommended to reduce drift and increase application accuracy. Care should be taken when using automatic rate controlling devices to spray the material within the rated working pressure and flow ranges of the nozzle selected. Nozzle screens should be used when recommended by the manufacturer. All nozzles should be placed on 20-inch centers, except flooding types which should be placed on 40-inch centers. When Flat Fan-type nozzles are used, angles of 80° or 110° are recommended. Always read and follow the manufacturer's directions for optimum setup and performance of their nozzles or tips.

**Aerial Application (For Sharda Atrazine 33% + Metolachlor 26.1% SE Alone):** Use aerial application only where broadcast applications are specified. Use the appropriate amount of **Sharda Atrazine 33% + Metolachlor 26.1% SE** in sufficient water to equal a minimum of 2.0 gals./acre of total spray. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. In order to assure that spray will be controllable within the target area when used according to the label directions, make applications at a maximum height of 10 ft., using low-drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive non-target plants, make application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

#### AERIAL DRIFT MANAGEMENT

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

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses, or to applications using dry formulations.

1. The distance of the outermost nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees.

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

The applicator should be familiar with and take into account the information covered in the **AERIAL DRIFT REDUCTION ADVISORY INFORMATION** section below.

#### AERIAL DRIFT REDUCTION ADVISORY INFORMATION

##### Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. 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 Inversions**).

##### 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** – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** – Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** – Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from 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 the largest droplets and the lowest drift.

##### 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

Applications should not be made at a height greater than 10 ft. 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 downward. 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 spray 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

Applications should not occur 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 concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

### Sensitive Areas

The pesticide 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).

### MIXING PROCEDURES

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

Shake 2.5 gals. jugs well or thoroughly recirculate larger containers and bulk tanks prior to using. **Sharda Atrazine 33% + Metolachlor 26.1% SE** is a liquid that may be mixed with water or fluid fertilizer and applied as a spray. **Sharda Atrazine 33% + Metolachlor 26.1% SE** may also be sprayed onto dry bulk granular fertilizer and applied with the granular fertilizer.

### Dry Bulk Granular Fertilizers

Many dry bulk granular fertilizers may be impregnated or coated with **Sharda Atrazine 33% + Metolachlor 26.1% SE** and used to control weeds in corn or Concep-treated sorghum.

When making application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** with dry bulk granular fertilizers, follow all directions for use and precautions on the **Sharda Atrazine 33% + Metolachlor 26.1% SE** label regarding target crops, rates per acre, soil texture, application methods, and rotational crops.

- Impregnation of bulk fertilizer is restricted to commercial facilities. On-farm fertilizer impregnation is prohibited.
- No more than 500 tons of dry bulk fertilizer can be impregnated per day.
- No single facility may impregnate fertilizer with this product for more than 30 days per calendar year.
- The commercial facility impregnating the dry bulk fertilizer must inform, in writing, the user (applicator) of the dry bulk fertilizer that:
  - Applicators must wear long-sleeved shirt, long pants, shoes, and socks
  - The restricted entry interval is 24 hours

All individual state regulations relating to dry bulk granular fertilizer blending, registration, labeling, and application are the responsibility of the individual and/or company selling the herbicide/fertilizer mixture.

Prepare the herbicide/fertilizer mixture by using any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Nozzles used to spray **Sharda Atrazine 33% + Metolachlor 26.1% SE** onto the fertilizer must be placed to provide uniform spray coverage. Care should be taken to 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. Absorptive materials should be added only after the herbicide has been thoroughly blended into the fertilizer mixture. Best application results will be obtained by using a granule of 6/30 particle size or of a size similar to that of the fertilizer material being used. Typically, less than 2% by weight of absorptive material will be needed. Avoid using more than 5% absorptive material by weight.

Calculate the amount of **Sharda Atrazine 33% + Metolachlor 26.1% SE** to be used by the following:

Tons of Fertilizer	X	Quarts of <b>Sharda Atrazine 33% + Metolachlor 26.1% SE</b> per Acre	=	Quarts of <b>Sharda Atrazine 33% + Metolachlor 26.1% SE</b> per Ton of Fertilizer
Acres				

### Pneumatic (Compressed Air) Application

High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer may cause fertilizer mixtures to build up or plug the distributor head, air tubes, or nozzle deflector plates. To minimize buildup, premix **Sharda Atrazine 33% + Metolachlor 26.1% SE** with Exxon Aromatic 200 at a rate of 2.0-2.5 pts./gals. of **Sharda Atrazine 33% + Metolachlor 26.1% SE**. Aromatic 200 is a non-combustible/nonflammable petroleum product. Aromatic 200 may be used in either a fertilizer blender or through direct injection systems. Drying agents should not be used when using Aromatic 200.

### Notes:

- Mixtures of **Sharda Atrazine 33% + Metolachlor 26.1% SE** and Aromatic 200 must be used on dry fertilizer only. Poor results or crop injury may result if these mixtures are used in water or liquid fertilizer solutions for spraying applications.
- When impregnating **Sharda Atrazine 33% + Metolachlor 26.1% SE** in a blender before application, a drier mixture can be attained by substituting a drying agent for Aromatic 200. The use of Agsorb FG or another drying agent of 6/30 particle size is recommended.
- Drying agents are not recommended for use with On-The-Go impregnation equipment.

### Precautions:

To avoid potential for explosion:

- Do not impregnate **Sharda Atrazine 33% + Metolachlor 26.1% SE** on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers.
- Do not combine **Sharda Atrazine 33% + Metolachlor 26.1% SE** with a single superphosphate (0-20-0) or treble superphosphate (0-46-0).
- Do not use **Sharda Atrazine 33% + Metolachlor 26.1% SE** on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

### Application

Apply 200-700 lbs. of the herbicide/fertilizer mixture per acre. For best results, 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 or injury to subsequent rotational crops. Nonuniform application may also result in unsatisfactory weed control. In areas where conventional tillage is practiced, a shallow incorporation of the mixture into the soil is recommended to obtain satisfactory weed control. 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, make applications approximately 30 days before planting to allow moisture to move the herbicide/fertilizer mixture into the soil. On coarse-textured soils, make applications approximately 14 days prior to planting.

### Precautions:

- To help avoid rotational crop injury, make applications as early as possible, since **Sharda Atrazine 33% + Metolachlor 26.1% SE** impregnated onto dry bulk granular fertilizers can be expected to last longer in the soil than when Bicep II Magnum is applied as a spray in water or fluid fertilizer.
- To avoid potential crop injury, do not use the herbicide/fertilizer mixture on crops where planting beds are to be formed.

### Application of Sharda Atrazine 33% + Metolachlor 26.1% SE in Water or Fluid Fertilizers

**Sharda Atrazine 33% + Metolachlor 26.1% SE Alone:** Fill the spray tank  $\frac{1}{2}$  -  $\frac{3}{4}$  full with water or fluid fertilizer, add the specified amount of **Sharda Atrazine 33% + Metolachlor 26.1% SE**, then add fill the remaining with water or fluid fertilizer. Maintain sufficient agitation during mixing and application to maintain a uniform suspension.

### Tank Mixtures

Fill the spray tank  $\frac{1}{2}$  -  $\frac{3}{4}$  full with water or fluid fertilizer, add the specified amount of **Sharda Atrazine 33% + Metolachlor 26.1% SE**, then add AAtrex, Balance, Banvel®, Linuron, or Princep; next add Dual Magnum, or Dual II Magnum; then add Gramoxone brands, Landmaster BW, Touchdown brands, Roundup brands or other glyphosate products, depending on the tank mix combination desired; and finally, fill the reaming with water or fluid fertilizer. Only water may be used with **Sharda Atrazine 33% + Metolachlor 26.1% SE + Liberty®** Herbicide when applied post-emergence to corn designated as tolerant to Liberty (glufosinate); and with Roundup brands or Touchdown brands when applied post-emergence to corn designated as glyphosate-tolerant (e.g. Agrisure® or Roundup Ready®). Maintain sufficient agitation during mixing and application to maintain a uniform suspension.

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

### Compatibility Test

A jar test is recommended before tank mixing to ensure compatibility of **Sharda Atrazine 33% + Metolachlor 26.1% SE** with other pesticides. The following test assumes a spray volume of 25 gals./acre. For other spray volumes, make appropriate changes in the ingredients.



**Note:** Nitrogen solutions or complete fluid fertilizers may replace all or part of the water in the spray. Because liquid fertilizers vary, even within the same analysis, **always check compatibility with pesticide(s) before use.** Incompatibility of tank mixtures is more common with suspensions of fertilizer and pesticides.

#### Test Procedure

1. Add 1.0 pt. of carrier (fertilizer or water) to each of 2 one qt. jars with tight lids. **Note:** Use the same source of water that will be used for the tank mix and conduct the test at the temperature the tank mix will be applied.
2. To one of the jars, add ¼ tsp. or 1.2 mL of a compatibility agent approved for this use, such as Compex® or Unite® (¼ tsp. is equivalent to 2.0 pts./100 gals. spray). Shake or stir gently to mix.
3. To both jars, add the appropriate amount of pesticide(s) in their relative proportions based on recommended label rates. If more than one pesticide is used, add them separately with dry pesticides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix.
4. After adding all ingredients, put lids on and tighten, and invert each jar ten times to mix. Let the mixtures stand 15-30 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility:
  - a) slurry the dry pesticide(s) in water before addition, or
  - b) add ½ the compatibility agent to the fertilizer or water and the other ½ to the emulsifiable concentrate or flowable pesticide before addition to the mixture. If incompatibility is still observed, do not use the mixture.
5. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the **Storage and Disposal** section in this label.

#### Sharda Atrazine 33% + Metolachlor 26.1% SE Combinations – Corn\*

Always follow label instructions for tank mix products when mixing with **Sharda Atrazine 33% + Metolachlor 26.1% SE.**

\*When tank mixing **Sharda Atrazine 33% + Metolachlor 26.1% SE** with AAtrex formulations, see the **Sharda Atrazine 33% + Metolachlor 26.1% SE Rate Limitations** section of this label. Do not exceed the following:

On highly erodible land with less than 30% plant residue cover prior to crop emergence	1.6 lbs. a.i. of atrazine
On other land prior to crop emergence	2.0 lbs. a.i. of atrazine
Post-emergence applications only – any land	2.0 lbs. a.i. of atrazine
Pre-emergence + post-emergence applications	2.5 lbs. a.i. of atrazine

#### Tank Mixture with AAtrex, Dual Magnum, Dual II Magnum, Princep, or Balance

**Note:** Check the compatibility of **Sharda Atrazine 33% + Metolachlor 26.1% SE** tank mixtures with Balance prior to mixing in spray tank by using the procedure described under **Application in Water or Fluid Fertilizers.**

**AAtrex (4L or Nine-O®):** Add up to 1.0 qts. of AAtrex 4L (1.1 lbs. of Nine-O) per acre to the rate of **Sharda Atrazine 33% + Metolachlor 26.1% SE** recommended in Table 3 (do not exceed the above atrazine limit) in the southeastern U.S. where high rainfall can shorten the duration of control of broadleaf weeds, and in all areas where heavy infestations of cocklebur, morningglory, velvetleaf, or other broadleaf weeds claimed are expected.

**Dual Magnum Products:** Add up to 0.33 pt. of Dual Magnum or Dual II Magnum per acre to the rate of **Sharda Atrazine 33% + Metolachlor 26.1% SE** recommended in Table 3 when heavy infestations of yellow nutsedge, sandbur, or seedling johnsongrass are expected.

**Princep (4L or Caliber 90®):** Add up to 1.0 qt. of Princep 4L (1.1 lbs. of Caliber 90) per acre to the rate of **Sharda Atrazine 33% + Metolachlor 26.1% SE** recommended in Table 3 where heavy infestations of crabgrass or fall panicum are expected or additional control of certain broadleaves is desired.

**Balance (Field Corn Only):** The tank mixture of **Sharda Atrazine 33% + Metolachlor 26.1% SE** + Balance provides control of weeds listed on the **Sharda Atrazine 33% + Metolachlor 26.1% SE** label, certain weed biotypes resistant to ALS-inhibitor herbicides and to triazine herbicides, velvetleaf, and others on the respective product labels. Balance will contribute to the control of problem grass and other broadleaf species on its label. Application may be pre-plant (surface-applied up to 14 days before to planting), pre-plant incorporated, or pre-emergence in conventional tillage, conservation tillage, and no-till systems. Refer to **Table 1: Sharda Atrazine 33% + Metolachlor 26.1% SE – Early Pre-Plant** for the early pre-plant application rate (8-14 days before planting) or refer to **Table 3** for the appropriate rate for pre-plant (surface-applied 0-7 days before planting), pre-plant incorporated, or pre-emergence application. Refer to the **Application Procedures** and **Tank Mix Directions** on the Balance label, but to reduce the potential for injury from Balance contact with corn, use 1.0 oz./acre of Balance on coarse-textured soils and 1.0-1.5 oz./acre on medium- and fine-textured soils in conventional, conservation, and no-tillage systems. For early pre-plant applications 8-14 days before planting, add 0.5 oz./acre of Balance to the rates of Balance described above.

Observe all applicable directions, precautions, and limitations on the **Sharda Atrazine 33% + Metolachlor 26.1% SE** and Balance labels when applying these products in tank mix combination in states where Balance is registered. Where difficult species and/ or severe weed populations are expected, use the maximum rates of **Sharda Atrazine 33% + Metolachlor 26.1% SE** and Balance where rate ranges are listed for this tank mixture.

**Tank Mixture of Sharda Atrazine 33% + Metolachlor 26.1% SE Alone or Sharda Atrazine 33% + Metolachlor 26.1% SE + AAtrex, Balance, Dual Magnum, Dual II Magnum, or Princep, with Gramoxone Brands, Landmaster BW, Touchdown Brands, or Roundup Brands**

In minimum-tillage or no-tillage systems where corn is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, the contact herbicides Gramoxone brands, Landmaster BW, Touchdown, or Roundup should be tank mixed with **Sharda Atrazine 33% + Metolachlor 26.1% SE** alone or with **Sharda Atrazine 33% + Metolachlor 26.1% SE + AAtrex, Balance, Dual Magnum, Dual II Magnum, or Princep**. When used as directed, the Gramoxone brands portion of the tank mixture controls most emerged annual weeds and suppresses many perennial weeds. Landmaster BW, Touchdown, or Roundup combinations will control emerged annual and perennial weeds when applied as directed on its label. The **Sharda Atrazine 33% + Metolachlor 26.1% SE** portion of the tank mixture provides pre-emergence control of the weeds listed on this label in the **Sharda Atrazine 33% + Metolachlor 26.1% SE Alone** section for corn. The addition of AAtrex, Balance, Dual Magnum, Dual II Magnum, or Princep offers the advantage indicated above.

**Application:** Make application before, during, or after planting, but before corn emerges, at the appropriate rate in Table 7. Up to 0.75 qt. of AAtrex 4L (0.8 lb. of Nine-O), or 1.0-2.0 oz. of Balance (refer to **Tank Mixture with Balance** for specific rate), or 0.33 pt. of Dual Magnum or Dual II Magnum or 1.0 qt. of Princep 4L (1.1 lbs. of Caliber 90) per acre may be added to the rate of **Sharda Atrazine 33% + Metolachlor 26.1% SE** recommended in Table 7. Add Gramoxone brands, Landmaster BW, Touchdown brands, or Roundup brands at labeled rates. **Tank mixtures with Balance can be used only pre-emergence on field corn.**

Make application in 20-60 gals. of water per acre with conventional spray equipment.

**Tank Mixture of Sharda Atrazine 33% + Metolachlor 26.1% SE Alone or Sharda Atrazine 33% + Metolachlor 26.1% SE + AAtrex, or Balance, with 2,4-D or 2,4-D + Banvel**

In minimum-tillage or no-tillage systems where corn is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** may be made in combination with AAtrex or Balance. When used as directed, the **Sharda Atrazine 33% + Metolachlor 26.1% SE** portion of the tank mixture provides pre-emergence control of the weeds listed on this label in the **Sharda Atrazine 33% + Metolachlor 26.1% SE Alone** section for corn.

**Application:** Make application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** before, during, or after planting, but before corn emerges, at the appropriate rate in Table 7. Up to 0.75 qt. of AAtrex 4L (0.8 lb. of Nine-O), or 1.0-2.0 oz. of Balance (refer to **Tank Mixture with Balance** for specific rate), per acre may be added to the rate of **Sharda Atrazine 33% + Metolachlor 26.1% SE** recommended in Table 7.

For control of broadleaf weeds or where heavy crop residues exist, add an appropriately labeled 2,4-D amine or low volatile ester to the spray tank last and apply in a minimum of 25 gals. of carrier per acre.

As carriers, nitrogen solutions and complete liquid fertilizers, applied before corn emergence, enhance burndown of existing weeds, and therefore, are recommended instead of water. Add X-77® surfactant at 1.0-2.0 qts./100 gals. of diluted spray, or another surfactant cleared for use on growing crops at its recommended rate. Make application before weeds exceed 3" in height. If alfalfa is present, add Banvel to the spray mixture at 0.33-0.5 pt./acre and apply before alfalfa exceeds 6" in height.

For fields with existing sod grasses (e.g., bromegrass, orchardgrass, rye, or timothy), when existing weeds exceed 3" in height or when very dry conditions exist, add Gramoxone brands at the rate of 2.5 pts./acre in place of, or in addition to, 2,4-D as indicated above. Do not apply Gramoxone brands in suspension-type liquid fertilizer. Observe all directions for use, precautions, and limitations on the respective product labels when applying these products in tank mix combination.

**Table 7: Sharda Atrazine 33% + Metolachlor 26.1% SE for Minimum-Tillage or No-Tillage Corn**

Soil Texture	Broadcast Rate Quarts per Acre
<b>COARSE</b> Sand, loamy sand, sandy loam	1.6
<b>MEDIUM</b> Loam, silt loam, silt	2.1
<b>FINE</b> Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1 <sup>A</sup>
	2.1 - 2.58 <sup>B*</sup>
<b>Muck or peat soils</b>	Do Not Use.
*For cocklebur, yellow nutsedge, and velvetleaf control on fine-textured soils above 3% organic matter, apply 2.58 qts. of <b>Sharda Atrazine 33% + Metolachlor 26.1% SE</b> per acre.	
<b>A.</b> Do not exceed this rate on highly erodible land with less than 30% plant residue cover. Control of certain weeds may be reduced and a tank mix partner or an application of a post-emergence herbicide may be needed.	
<b>B.</b> Use this rate for all other applications.	

**Tank Mixtures For Post-Emergence Weed Control in Field Corn**

For post-emergence control of weeds in specific types of field corn, the combinations listed below with **Sharda Atrazine 33% + Metolachlor 26.1% SE** may be used. Full season weed control from early pre-plant, pre-plant incorporated, or pre-emergence treatments can lead to maximum yield potential under competition-free conditions. However, if control of emerged weeds is needed, a post-emergence program as listed below can be used to provide residual control for the remainder of the season.

**Restrictions:**

- Follow all label directions, instructions, precautions, and limitations for each product.
- Do not use fluid fertilizer with these mixtures or corn injury may occur.
- For each tank mixture with **Sharda Atrazine 33% + Metolachlor 26.1% SE**, apply only to the specific field corn type specified on the tank mix product label.

**Precaution:**

- In-row weed control may be reduced because of lack of coverage when applied to corn over 4" tall.

- 1. Sharda Atrazine 33% + Metolachlor 26.1% SE + Liberty or Ignite® 280 SL Herbicide for Post-Emergence Use in LibertyLink® Corn** – Application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** + Liberty or Ignite 280 SL Herbicide tank mixture can be made post-emergence to weeds and corn from seed designated as LibertyLink or corn warranted by Bayer CropScience as being tolerant to Liberty Herbicide. Liberty or Ignite 280 SL Herbicide provide post-emergence control of a broad spectrum of grass and broadleaf weeds and the **Sharda Atrazine 33% + Metolachlor 26.1% SE** provides residual control of grasses and broadleaf weeds listed in the label section **Sharda Atrazine 33% + Metolachlor 26.1% SE Applied Alone - Weeds Controlled**. For the proper rate of **Sharda Atrazine 33% + Metolachlor 26.1% SE** to be applied post-emergence with Liberty or Ignite 280 SL Herbicide, refer to Table 3 and use the minimum rate per soil texture for season-long residual control. Consult the Liberty or Ignite 280 SL Herbicide label for the post-emergence application rate according to weed species and their maximum height at the time of post-emergence application. Where multiple weed species are present, use the highest Liberty or Ignite 280 SL Herbicide rate recommended to control the species and growth stages present.

Follow all applicable use directions, limitations, precautions, and information regarding application to corn on the **Sharda Atrazine 33% + Metolachlor 26.1% SE** and Liberty Herbicide labels.

- 2. Sharda Atrazine 33% + Metolachlor 26.1% SE + Touchdown Brands or Roundup Brands for Post-Emergence Application to Glyphosate-Tolerant (e.g. Agrisure or Roundup Ready)** – Application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** + Touchdown brands or Roundup brands tank mixture can be made post-emergence to weeds and to corn designated as glyphosate-tolerant. Application may be made post-emergence to glyphosate-tolerant corn up to 12" in height. This mixture will provide post-emergence control of weed species on the Touchdown brand or Roundup brand label, and also residual control of weed species on the **Sharda Atrazine 33% + Metolachlor 26.1% SE** label. Use the minimum **Sharda Atrazine 33% + Metolachlor 26.1% SE** rate post-emergence with Touchdown or Roundup in glyphosate-tolerant corn as specified in Table 3 of this label. Consult each product label and follow all appropriate use directions, application procedures, precautions, and limitations. Make application of Touchdown or Roundup for control of labeled broadleaf and grass weeds. Consult the Touchdown brand or Roundup brand label for directions to control problem species.
- 3. Sharda Atrazine 33% + Metolachlor 26.1% SE + Spirit®** - Make application of 1.33-1.75 qts./acre of **Sharda Atrazine 33% + Metolachlor 26.1% SE** + 1.0 oz./acre of Spirit to corn that is 4-12" tall. The application may be broadcast, semi-directed, or directed. The **Sharda Atrazine 33% + Metolachlor 26.1% SE** rate is based on soil texture with 1.33 qts./acre on coarse and 1.75 qts./acre on medium and fine soils. Add a nonionic surfactant at 0.25% v/v. This mixture is effective for control of many annual and broadleaf weeds and some grasses. A few instances of broadleaf weed control antagonism have been observed with this combination. Control of certain annual grasses can be improved with the addition of Accent.

**Restriction:**

- Do not use fertilizer or crop oil concentrate with these mixtures or injury to field corn may occur.

**Precautions:**

- The combination of **Sharda Atrazine 33% + Metolachlor 26.1% SE** with other products for post-emergence weed control in corn is generally not recommended. **These combinations may cause injury and/or weed control concerns that would not exist when the products are used separately.** A certain inherent risk is involved with the various combinations of these products used post-emergence in corn.

**Mixing Order**

Add these products to the tank mix in the following order:

1. Products in water-soluble bags should be added first.
2. **Sharda Atrazine 33% + Metolachlor 26.1% SE**
3. Additives

**Precautions:**

- Follow all label instructions, precautions, and rotational restrictions for individual products when making these applications to field corn. When **Sharda Atrazine 33% + Metolachlor 26.1% SE** is applied after June 10<sup>th</sup>, crop injury may occur the following year if you rotate to crops other than corn or sorghum.
- In-row weed control may be reduced because of lack of coverage when applied to corn over 4" tall.

**Sharda Atrazine 33% + Metolachlor 26.1% SE Combinations – Grain Sorghum (Seed treated with Concep®)****Tank Mixture of Sharda Atrazine 33% + Metolachlor 26.1% SE with Gramoxone Brands, Landmaster BW, Touchdown Brands, or Roundup Brands for Minimum-Tillage or No-Tillage Systems**

In minimum-tillage or no-tillage systems where grain sorghum is planted directly into a cover crop, stale seedbed, established sod, or

previous crop residues, the contact herbicides Gramoxone brands, Landmaster BW, Touchdown, or Roundup may be tank mixed with **Sharda Atrazine 33% + Metolachlor 26.1% SE**. When used as directed, the Gramoxone brands portion of the tank mixture controls most emerged annual weeds and suppresses many perennial weeds. Landmaster BW, Touchdown, or Roundup combinations will control emerged annual and perennial weeds when applied as directed on its label. The **Sharda Atrazine 33% + Metolachlor 26.1% SE** portion of the tank mixture provides pre-emergence control of the weeds listed on this label in the **Sharda Atrazine 33% + Metolachlor 26.1% SE Applied Alone** section.

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

**Application:** Make application before, during, or after planting, but before grain sorghum emerges, at the appropriate rate in Table 8. Add Gramoxone brands, Landmaster BW, or Roundup at labeled rates. Make application in a minimum of 20 gals. of water per acre with conventional spray equipment.

**Table 8: Sharda Atrazine 33% + Metolachlor 26.1% SE for Minimum-Tillage or No-Tillage Grain Sorghum (Seed treated with Concep®)**

Soil Texture	Organic Matter	Broadcast Rate Quarts per Acre
<b>COARSE</b> Sand, loamy sand, sandy loam	Any Level	Do Not Use.
<b>MEDIUM and FINE</b> Loam, silt loam, silt, sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	less than 1.0%	Do Not Use.
	1.0-1.5%	1.6
	more than 1.5%	1.8 - 2.1

**Precautions:**

To avoid possible crop injury:

- Do not make application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** on highly alkaline soils (pH greater than 8.0) or on eroded areas where calcareous subsoils are exposed.
- Do not make application of **Sharda Atrazine 33% + Metolachlor 26.1% SE** when sorghum is planted in deep furrows because heavy rains following application can cause excessive concentrations of herbicide in the furrow.
- Apply in a minimum of 20 gal. of water per acre with conventional spray equipment.
- Do not make application to sorghum grown under dry mulch tillage.
- Injury may occur if both an **Sharda Atrazine 33% + Metolachlor 26.1% SE** early pre-plant, pre-plant surface, pre-plant incorporated, or pre-emergence application is made and an at-planting systemic insecticide in-furrow application are used.
- In addition, sorghum growing under stress caused by minor element deficiency may be injured by **Sharda Atrazine 33% + Metolachlor 26.1% SE**.

**Restrictions:**

- Pre-Harvest Interval (PHI): Do not graze or feed sorghum forage for 60 days following preemergent use.
- Post-emergence applications to sorghum must be made before the crop reaches 12" in height.
- Do not use in NM or TX, except in the TX Panhandle, Gulf Coast, and Blacklands areas.
- Do not apply pre-plant incorporated in AZ or the Imperial Valley of CA.

**Rotational Crops:** Follow the crop rotation instructions in the **Sharda Atrazine 33% + Metolachlor 26.1% SE Alone** section.

### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a dry and cool place. Do not irradiate directly with sunlight.

**PESTICIDE DISPOSAL:** Open dumping is prohibited. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

**CONTAINER HANDLING [Less Than 5 Gallons]:** Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**CONTAINER HANDLING [Greater Than 5 Gallons]:** Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. 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 ¼ 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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

**CONTAINER HANDLING [For Bulk and Mini-Bulk Containers]:** Refillable container. Refill this container with pesticide only. Do not

use 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 person refilling. To clean 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

**CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!**

#### **CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Sharda USA LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Sharda USA LLC and Seller harmless for any claims relating to such factors.

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