

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

November 10, 2021

Mandy Styles Registration Manager Drexel Chemical Company P.O. Box 13327 Memphis, TN 38113-0327

Subject: Registration Review Label Amendments Incorporating Mitigation Measures from the Atrazine and Metolachlor Interim Decisions; the Technical Registrants' Commitments for the Endangered Species Act (ESA) Biological Evaluation for Atrazine; and the Biological Opinion for Metolachlor *Product Name*: Drexel Trizmet II *EPA Registration Number*: 19713-547 *Application Dates*: October 22, 2020 and March 24, 2021 *Decision Numbers*: 567139 and 572608

Dear Ms. Styles:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the atrazine and metolachlor Interim Decisions, the atrazine technical registrants' commitments for the ESA Biological Evaluation, and the Biological Opinion for metolachlor. The Agency has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 Page 2 of 2 EPA Reg. No. 19713-547 Decision No. 567139 and 572608

CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Anna Romanovsky at romanovsky.anna@epa.gov.

Sincerely,

Kelly Sherman

Kelly Sherman Chief, Risk Management and Implementation Branch III (RMIB III) Pesticide Re-Evaluation Division Office of Pesticide Programs U.S. Environmental Protection Agency

Enclosure



Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 19713-547

> **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.





For weed control in Field Corn, Popcorn, Sweet Corn, Grain Sorghum, and Forage Sorghum. Not for sale, use or distribution in Nassau County or Suffolk County, New York. Not for use in the states of Alaska or Hawaii or in the U.S. Territories (American Samoa, Guam, North Mariana Islands, Puerto Rico, U.S. Virgin Islands).

## ACTIVE INGREDIENTS:

Atrazine	33.1%
Atrazine Related Compounds	
Metolachlor	
OTHER INGREDIENTS:	40.2%
TOTAL:	

This product contains 3.1 pounds of Atrazine and related compounds per gallon and 2.4 pounds of Metolachlor active ingredient per gallon.

## KEEP OUT OF REACH OF CHILDREN CAUTION

(See FIRST AID on Page 2) (See FIRST AID Below) (See Side (Back) Panel for FIRST AID); (See Page \_\_\_\_ for FIRST AID) (See Booklet (Container Labeling) for Full Use Instructions) (See Container Labeling for (FIRST AID and) Complete Directions for Use) (See (Attached) Booklet (Container Labeling) for Complete Directions for Use)

(SHAKE WELL BEFORE USING); (RECIRCULATE CONTENTS BEFORE USE)

EPA Reg. No. 19713-547 EPA Est. No. 19713-XX-XXX

Manufactured By:

Net Content: \_\_\_\_ Gal. (\_\_\_\_L)



547SP-0721\*P

## FIRST AID

## IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious or convulsing person.

## IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 20 minutes.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call CHEMTREC at 800-424-9300 for emergency medical treatment information.

**NOTE TO PHYSICIAN:** If ingested, induce emesis or lavage stomach. Administration of an aqueous slurry of activated charcoal can be considered. Treat symptomatically.

#### PRECAUTIONARY STATEMENTS Hazards To Humans And Domestic Animals

**CAUTION:** Harmful if absorbed through skin. Harmful if swallowed. Avoid contact with skin, eyes, or clothing. This product may cause skin sensitization reactions in some people.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Mixers, loaders, applicators, flaggers and other handlers must wear:** Coveralls over short pants and short-sleeved shirt; chemical-resistant gloves made of any waterproof material including barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, neoprene rubber  $\geq$  14 mils, natural rubber  $\geq$  14 mils, polyethylene, polyvinyl chloride  $\geq$  14 mils or viton  $\geq$  14 mils; chemical-resistant footwear plus socks; a chemical-resistant apron when mixing/loading, cleaning up spills, or cleaning equipment, or otherwise exposed to the concentrate, and chemical resistant headgear for overhead exposure.

See "ENGINEERING CONTROLS" for additional requirements.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

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

## ENGINEERING CONTROLS

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 PPE required above 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.

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 WPS for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection.

When applicators use enclosed cabs in a manner that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(4-5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

## USER SAFETY RECOMMENDATIONS

**Users should:** 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) 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 pesticide contains Atrazine, which has been shown to be toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

## **Reporting Ecological Incidents:**

To report ecological incidents, including mortality, injury, or harm to plants and animals, call 1-901-774-4370.

## **Groundwater Advisory**

This product contains both the active ingredients Atrazine and Metolachlor. Atrazine can travel (seep or leach) through soil and can enter groundwater 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/S-metolachlor is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

## Surface Water Advisory

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

## **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 feet 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 feet of any well are prohibited, unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rain water that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means 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 requirements regarding well-head setbacks and operational area containment imposed by State must be observed.

This product must not be mixed or loaded within 50 feet of perennial or intermittent streams and rivers, natural or impounded lakes and reservoirs. This product must not be applied aerially or by ground within 66 feet of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66 feet 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-outletted terraced fields containing standpipes:

- 1) Do not apply this product within 66 feet 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 to 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 practice is described as a crop management practice where little or no crop residue is removed from the field during and after crop harvest.

## NON-TARGET ORGANISMS ADVISORY STATEMENT

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

## DIRECTIONS FOR USE

## ENDANGERED SPECIES PROTECTION REQUIREMENTS:

It is a Federal offense to use any pesticide in a manner that results in an unauthorized "take" (e.g. kill or otherwise harm) of an endangered species and certain threatened species, under the Endangered Species Act section 9. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult <u>http://www.epa/gov/espp/</u>, call 1-844-447-3813, or email <u>ESPP@epa.gov</u>. You must use the Bulletin valid for the month in which you will apply the product.

RESTRICTED USE PESTICIDE. 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. 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 <u>www.atrazine-watershed.info</u>, 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 Drexel Chemical Company for a refund.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 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 WPS. 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-incorporated, the WPS, 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 WPS and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves made of any waterproof material
- · Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposures

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

## Not for sale, use or distribution in Nassau County or Suffolk County, New York.

## Not for use in the states of Alaska or Hawaii or in the U.S. Territories (American Samoa, Guam, North Mariana Islands, Puerto Rico, U.S. Virgin Islands)

## USE INFORMATION

TRIZMET II is a selective herbicide that can be applied before planting, before or after emergence (see directions) for control of most annual grasses and broadleaf weeds in Field Corn, Popcorn, and Sweet Corn. This product can also be used before crop emergence to control most annual grasses and broadleaf weeds in Grain or Forage Sorghum provided the Sorghum seed has been properly treated by the seed company with Concep<sup>®</sup> or Screen<sup>®</sup>. This product may also be tank-mixed with other herbicides specified on this label for weed control in conventional, minimum-till, and no-till Corn, Grain Sorghum or Forage Sorghum.

It is the pesticide user's responsibility to ensure that all products in the tank-mixtures 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 and precautionary language of the products in the mixture.

Following many years of continuous use of Atrazine (one of the ingredients in this product), and products chemically related to Atrazine, biotypes of some of the weeds listed on this label which 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, use this product in combination or in sequence with herbicides which do not contain triazines. Consult with your State Agricultural Extension Service for specific recommendations. Refer to the *"RESISTANCE MANAGEMENT"* section of this label for additional information.

## Precautions to Observe When Using This Product:

- If Sorghum seed is not properly pretreated with Concep or Screen, this product will severely injure the crop.
- Injury may occur to Sorghum following the use of this product under abnormally high soil moisture conditions during early development of the crop

This product alone or in tank-mixture with Atrazine (e.g., Atrazine 4L or 90DF), Isoxaflutole (e.g., Balance<sup>®</sup>), Metolachlor (e.g., Me-Too-Lachlor<sup>™</sup>, Me-Too-Lachlor II, Dual II Magnum<sup>®</sup>) or Simazine (e.g., Simazine 4L or 90DF) may be applied early pre-plant, pre-plant surface, pre-plant incorporated or pre-emergence on Corn in water or fluid fertilizer. Apply post-emergence treatments of this product to Corn alone or in combination using water only as the carrier. This product may be applied in tank-mix combination with Paraquat (e.g., Quik-Quat<sup>™</sup>, Gramoxone<sup>®</sup>), Glyphosate + 2,4-D (Imitator<sup>®</sup> + 2,4-D, Landmaster<sup>®</sup> BW), or Glyphosate (e.g., Imitator, Roundup<sup>®</sup>) with or without the above herbicides pre-plant surface or pre-emergence to Corn or Sorghum. It is the pesticide user's responsibility to ensure that all products in the tank-mixtures 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-mixture.

This product may be applied in water by aircraft. Applications in fluid fertilizer should be only by ground equipment.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop injury may result.

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

Do not apply under conditions which favor runoff or wind erosion of soil containing this product to non-target areas.

To prevent off-site movement due to runoff or wind erosion: 1) 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. 2) Do not apply to impervious substrates such as paved or highly compacted surfaces. 3) Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least one-half inch of rainfall has occurred between application and the first irrigation.

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

Dry weather following pre-emergence application of this product or a tank-mixture may reduce effectiveness. Cultivate if weeds develop in conventional tillage Corn.

Thoroughly clean sprayer or other application device before using. Dispose of cleaning solution in a responsible manner. Do not use a sprayer or applicator contaminated with other materials or crop damage or sprayer clogging of the application device may occur.

## **USE SITE RESTRICTION**

Not for use in the states of Alaska or Hawaii or in the U.S. Territories (American Samoa, Guam, North Mariana Islands, Puerto Rico, U.S. Virgin Islands).

## **USE PROHIBITION**

Use on Conifers including Christmas tree plantings; Conservation Reserve Program (CRP); Forestry; Roadsides; Timber; Miscanthus and other perennial bioenergy crops is prohibited.

## HERBICIDE RESISTANCE MANAGEMENT

ATRAZINE	GRO	OUP	5	HERI	BICIDE
METOLACHL	OR	GRO	UP	15	HERBICIDE

For resistance management, this product is a Group 5 and Group 15 modes of action herbicides. Any weed population may contain or develop plants naturally resistant to this product and other Group 5 and Group 15 modes of action herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of this product or other Group 5 and Group 15 modes of action herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank-mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. 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.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Drexel Chemical Company representatives at (901) 774-4370.

## SPRAY DRIFT MANAGEMENT REQUIREMENTS

## AERIAL APPLICATIONS:

## SPRAY DRIFT

- Do not release spray at a height greater than 10 feet above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a coarse or coarser droplet size (ASABE S572).
- If the wind speed is 10 mph or less, applicators must use one-half swath displacement upwind at the downwind edge of the field. When the wind speed is between 11 to 15 mph, applicators must use three-fourths swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must not exceed 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed wing aircraft and 90% or less of the rotor diameter for helicopters.
- User must maintain a 150 foot (46 meter) in-field downwind buffer (in the direction in which the wind is blowing) from the edge of streams and rivers as well as high-tide line for all estuarine/marine environments.
- Do not apply during temperature inversions.

## **GROUND BOOM APPLICATIONS:**

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a coarser or coarser droplet size (ASABE S572).
- Do not apply when wind speeds exceed 10 mph at the application site.
- User must maintain a 15 foot (4.6 meter) in-field downwind buffer (in the direction in which the wind is blowing) from the edge of streams and rivers as well as high-tide line for all estuarine/marine environments.
- Do not apply during temperature inversions.

## **BOOMLESS GROUND APPLICATIONS:**

- Applicators are required to use medium coarse or coarser droplet size (ASABE S572) for all applications.
- Do not apply when wind speeds exceed 15 10 mph at the application site.
- User must maintain a 15 foot (4.6 meter) in-field downwind buffer (in the direction in which the wind is blowing) from the edge of streams and rivers as well as high-tide line for all estuarine/marine environments.
- Do not apply during temperature inversions.

## **SPRAY DRIFT ADVISORIES**

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

## IMPORTANCE OF DROPLET SIZE

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

## **Controlling Droplet Size - Ground Boom**

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

• Spray Nozzle- Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

## **Controlling Droplet Size - Aircraft**

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

## **BOOM HEIGHT – GROUND BOOM**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

## **RELEASE HEIGHT - AIRCRAFT**

Higher release heights increase the potential for spray drift.

## SHIELDED SPRAYERS

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

## TEMPERATURE AND HUMIDITY

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

## **TEMPERATURE INVERSIONS**

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

## WIND

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

## **BOOMLESS GROUND APPLICATIONS**

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

## HANDHELD TECHNOLOGY APPLICATIONS

Take precautions to minimize spray drift.

## **MIXING INSTRUCTIONS**

Shake 2.5 gallon jugs well or thoroughly recirculate larger containers and bulk tanks before using. This product is a liquid that may be mixed with water or fluid fertilizer and applied as a spray. This product 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 this product and used to control weeds in Corn or Concep or Screen treated Sorghum.

Impregnation of bulk fertilizer is restricted to commercial facilities. On-farm fertilizer impregnation is prohibited. No more than 340 tons of dry bulk fertilizer per worker per day for no more than 30 days per calendar year may be impregnated for use on Corn and Sorghum.

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; and, the restrictedentry interval is 24 hours. When applying this product with dry bulk granular fertilizers, follow all directions for use and use precautions on this product label regarding target crops, rates per acre, soil texture, application methods, and rotational crops. 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 this product 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<sup>®</sup> F.G. or Celatom MP-79<sup>®</sup> 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 six/thirtieth particle size or a size similar to that of the fertilizer material being used. Generally, less than 2% by weight of absorptive material will be needed. Avoid using more than 5% absorptive material by weight.

Calculate the amount of this product to be used by the following formula:

2000	Х	Quarts of This Product	=	Quarts of This Product
Pounds of fertilizer per acre		per acre		per ton of fertilizer

## 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 this product with Exxon Aromatic 200 at a rate of 2 to 2.5 pints per gallon of this product. Aromatic 200 is a noncombustible/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:** (1) Mixtures of this product 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. (2) When impregnating this product in a blender before application, a drier mixture can be attained by substituting a drying agent for Aromatic 200. The use of Agsorb F.G. or another drying agent of six/thirtieth particle size is recommended. (3) Drying agents are not recommended for use with On-The-Go impregnation equipment.

## Use Restrictions:

To avoid potential for explosion:

(1) Do not impregnate this product on ammonium nitrate, potassium nitrate or sodium nitrate, either alone or in blends with other fertilizers. (2) Do not combine this product with a single superphosphate (0-20-0) or treble superphosphate (0-46-0). (3) Do not use this product on straight limestone since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

## APPLICATION

Apply 200 to 700 pounds 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. Non-uniform 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.

**Use Precautions:** (1) To help avoid rotational crop injury, make applications as early as possible since this product impregnated onto dry bulk granular fertilizers can be expected to last longer in the soil than when this

product is applied as a spray in water or fluid fertilizer. (2) To avoid potential crop injury, do not use the herbicide/fertilizer mixture on crops where planting beds are to be formed.

## **Application in Water or Fluid Fertilizers**

**This Product Alone:** Fill the spray tank one-half to three-quarters full with water or fluid fertilizer, add the proper amount of this product, then add the rest of the water or fluid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform suspension.

**Tank-mixtures:** This product may be tank-mixed with the following herbicides provided the specific product tankmixed is registered for use on the sites listed on this label. It is the pesticide user's responsibility to ensure that all products in the tank-mixtures 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 and precautionary language of the products in the mixture.

Fill the spray tank one-half to three-quarters full with water or fluid fertilizer, add the proper amount of this product then add Atrazine (e.g., Atrazine 4L or 90DF), Isoxaflutole (e.g., Balance), Dicamba (e.g., Banvel<sup>®</sup>), Linuron or Simazine (e.g., Simazine 4L or 90DF); next add Metolachlor (e.g., Me-Too-Lachlor, Me-Too-Lachlor II); then add Paraquat (e.g., Quik-Quat, Gramoxone), Glyphosate (e.g., Imitator or Roundup) or Glyphosate + 2,4-D (e.g., Imitator + 2,4-D, Landmaster BW) depending on the tank-mix combination desired; and finally, add the rest of the water or fluid fertilizer. Only water may be used with this product plus Glufosinate (e.g., Liberty<sup>®</sup> Herbicide) when applied post-emergence to Corn tolerant to Glufosinate (e.g., Roundup Ready<sup>®</sup>). Provide sufficient agitation during mixing and application to maintain a uniform suspension.

## COMPATIBILITY TEST

A jar test is recommended before tank-mixing to ensure compatibility of this product with other pesticides. The following test assumes a spray volume of 25 gallons per 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 pint of carrier (fertilizer or water) to each of 2 one-quart 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 0.25 teaspoonful or 1.2 milliliters of a compatibility agent approved for this use, such as Compex<sup>®</sup>, MIX<sup>™</sup> or Unite<sup>®</sup> (0.25 tsp. is equivalent to 2 pt./100 gal. spray). Shake or stir gently to mix.
- 3) To both jars, add the appropriate amount of pesticide(s) in their relative proportions based on 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 10 times to mix. Let the mixtures stand 15 to 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 2 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 one-half of the compatibility agent to the fertilizer or water and the other one-half to the emulsifiable concentrate or flowable pesticide before addition to the mixture. If incompatibility is observed, do not use the mixture.

5) After compatibility testing is complete, dispose of any pesticide wastes in accordance with the directions in the "STORAGE AND DISPOSAL" section of this label.

## SOIL TEXTURE INFORMATION

Within rate ranges in all tables on this label, use the lower rate on soil relatively coarse textured or low in organic matter. Use the higher rate on soil relatively fine textured or high in organic matter.

Use directions are based upon soil textures which are defined as follows:

COARSE	Sand, Loamy sand, Sandy loam
MEDIUM	Loam, Silt Ioam, Silt
FINE	Sandy clay loam, Silty clay loam, Clay loam, Sandy clay, Silty clay, Clay

## **APPLICATION PROCEDURES**

## 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 to 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 gallons 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:

band width in inches	х	broadcast rate	=	amount needed
row width in inches		per acre		per acre of field

Use Restriction: Application using mechanically pressurized handguns to Sweet corn is prohibited.

## Low Carrier Application (Broadcast Ground Application Only)

Use sprayers, such as Ag-Chem RoGator<sup>®</sup>, Hagie, John Deere Hi-Cycle<sup>™</sup>, John Deere 4700 Sprayer, Melroe Spra-Coupe, Tyler Patriot<sup>™</sup> or Willmar Air Ride<sup>®</sup> 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 to 40 psi at the nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension. Use a minimum of 5 gallons of spray mixture per acre. Maximum 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 this Product Alone)

Use aerial application only where broadcast applications are specified. Apply a minimum of 1 gallon of water for each 1 gallon of this product applied per acre. For rates below 1 gallon per acre, use sufficient water to equal 2 gallons per acre of total spray. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. To assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 feet 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, apply this product by aircraft at a minimum upwind distance of 400 feet from sensitive plants.

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

## THIS PRODUCT APPLIED ALONE — CORN (FIELD, POP, SWEET), GRAIN SORGHUM OR FORAGE SORGHUM

## **Use Precautions – Sorghum**

If Sorghum seed is not properly pretreated with Concep or Screen, this product will severely injure the crop. Injury may occur to Sorghum following the use of this product under abnormally high moisture conditions during early development of the crop.

## Use Restrictions – Corn and Sorghum

- Do not graze or feed forage from treated areas for 60 days following application for all types of Corn except Sweet Corn.
- For Sweet Corn, do not graze or feed forage from treated areas for 45 days following application.
- Applications using mechanically pressurized handguns to Sweet Corn is prohibited.
- Do not graze or feed forage from pre-emergent treated Sorghum for 60 days.
- Do not apply Atrazine and Propazine containing products to the same Sorghum acre.

## Atrazine and/or Simazine Rate Limitations for This Product - Corn and Sorghum

When tank-mixing or sequentially applying products containing Atrazine in Sorghum or Atrazine and/or Simazine to Corn, do not exceed an application rate of 2 pounds of either active ingredient alone or a combination of both active ingredients per acre for any single application, and the total pounds of Atrazine and/or Simazine applied (lbs./A) must not exceed 2.5 pounds of the combined active ingredients per year.

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, this product contains 3.1 pounds of the active ingredient Atrazine per gallon (0.775 lb. a.i./qt.).

## 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 2.5 qt. of this product per acre as a single broadcast spray. Refer to "**B**." in tables following. If the soil coverage with plant residue is less than 30% at planting, a maximum of 2.0 qt. of this product per acre may be applied as a single pre-emergence application. Refer to "**A**." in tables following.
- On Land Not Highly Erodible: Apply a maximum of 2.5 qt. of this product per acre as a single broadcast spray. Refer to "B." in tables following.

## FOR POST-EMERGENCE APPLICATION

If no Atrazine and/or Simazine were applied prior to Corn emergence, apply a maximum of 2.5 qt. of this product per acre broadcast. If a post-emergence treatment is required following an earlier herbicide application, the total Atrazine and/or Simazine applied may not exceed 2.5 lb. of the combined active ingredients per acre per year.

## Metolachlor Rate Limitations for This Product - Corn and Sorghum

Refer to "APPLICATION TIMING AND PROCEDURES" section below for Metolachlor rate limitations for Corn and Sorghum.

## **Rotational Crops**

Do not rotate to food or feed crops other than those listed below.

- 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 or Screen. Do not make a second broadcast application. If the original application was banded and the second crop is planted in the untreated row middles, a second treatment may be applied.
- Corn, Sorghum, Soybeans, Cotton or Peanuts may be planted in the Spring following treatment. Do not graze or feed forge or fodder from Cotton to livestock or illegal residues may result.

- Injury may occur to Soybeans planted the year following application on soils having a calcareous surface layer.
- In eastern parts of the Dakotas, KS, western MN, and NE, do not rotate to Soybeans for 18 months following applications if the rate applied to Corn or Sorghum was more than 2.0 pounds a.i. of Atrazine or equivalent band application rate, or Soybean injury may occur.
- If applied after June 10, 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, use only when 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 applications or injury may occur.

## Early Pre-plant, Pre-plant Surface-Applied, Pre-plant Incorporated or Pre-emergence

Weeds Controlled		Weeds Partially Controlled**
Barnyardgrass (watergrass)	Henbit	Sandbur
Browntop panicum	Jimsonweed	Seedling johnsongrass
Carpetweed	Lambsquarters	Shattercane
Chickweed	Morningglory	Sicklepod
Cocklebur*	Mustards	Volunteer Sorghum
Common purslane	Nightshades	Wooly cupgrass
Common ragweed	Pigweed	
Crabgrass	Prairie cupgrass	
Crowfootgrass	Red rice	
Fall panicum	Signalgrass (Brachiaria)*	
Florida pusley		
Foxtail millet	Southwestern cupgrass	
Galinsoga	Velvetleaf*	
Giant foxtail	Waterhemp	
Giant ragweed*	WItchgrass	
Goosegrass	Yellow foxtail	
Green foxtail	Yellow nutsedge*	

\*Control of these weeds can be erratic, especially under dry weather conditions. Control escaped weeds with cultivation or application of an appropriate EPA-registered post-emergence herbicide. On fine textured soils, only partial control can be expected.

\*\*Control may be improved by following these procedures:

1) Apply up to the maximum single application rate in **Table 1** for your given soil texture and rate limitation based on your soil conservation practices.

- 2) Thoroughly till moist soil to destroy germinating and emerged weeds. If this product is to be applied pre-plant incorporated, this tillage may be used to incorporate this product if uniform 2 inch incorporation is achieved as directed under "APPLICATION PROCEDURES".
- 3) Plant crop into moist soil immediately after tillage. If this product is to be used pre-emergence, apply at planting or immediately after planting.

4) If available, sprinkler irrigate within 2 days after application. Apply one-half to 1 inch of water. Use lower water volume (one-half inch) on coarse textured soils and higher volume (1 inch) on fine textured soils.

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 is recommended as soon as weeds emerge.

## **APPLICATION TIMING AND 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 two-thirds the specified rate of this product as a split treatment 30 to 45 days before planting and the remainder at planting, using the rates in **Table 1**. Applications made less than 30 days prior to planting may be as either a split or single treatment. Use the lower rate for light expected weed infestations and the higher rate for heavy expected weed infestations. On coarse-textured soils, apply 2.0 quarts of this product per acre not more than 2 weeks prior to planting.

The above procedure may be followed if Atrazine, Metolachlor or Simazine is used in tank-mixtures with this product. 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 (e.g., Paraquat, Glyphosate). It is the pesticide user's responsibility to ensure that all products in the tank-mixtures 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 and precautionary language of the products in the mixture.

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., Atrazine, Primisulfuron (e.g., Beacon<sup>®</sup>), Dicamba (e.g., Banvel), Bentazon (e.g., Basagran<sup>®</sup>), Bromoxynil (e.g., Brominal<sup>®</sup>, Buctril<sup>®</sup>), Prosulfuron + Primisulfuron (e.g., Exceed<sup>®</sup>), Dicamba + Atrazine (e.g., Marksman<sup>®</sup>) or 2,4-D (e.g., De-Amine<sup>®</sup>, De-Ester<sup>®</sup>). 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.

This product 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. 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 application. Depending on rainfall, 10 to 20 days may be required to completely kill Wheat. In the event that adequate rainfall does not occur, control of the Winter Wheat may be unsatisfactory and the application of a contact herbicide such as Paraquat (e.g., Quik-Quat, Gramoxone) or Glyphosate (e.g., Imitator, Roundup) may be required before planting the crop.

This product may be applied in the Fall as a single application to control Winter weeds listed on this label within the ecofallow (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. Fall application should not be applied to frozen ground and this is restricted to IA, MN, ND, SD, WI and portions of NE and IL.

On medium and fine textured soils following final seedbed preparation in the Blacklands and Gulf Coast areas of TX, an early pre-plant application of this product at 1.6 to 1.9 quarts per acre may be made 30 to 45 days before planting. Grass suppression of 2 to 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 Metolachlor may be needed in fields with a history of heavy grass pressure. Apply after planting, but before Corn and grass weeds emerge.

**Notes:** (1) If a follow-up application of Metolachlor (e.g., Me-Too-Lachlor II, Dual II Magnum) is needed, do not exceed a total of 1.6 pounds of Metolachlor per acre including the pre-plant application of this product on medium or fine textured soils. On fine textured soils with more than 3% organic matter, do not exceed 1.9 pounds of Metolachlor. [To determine the total pounds of Metolachlor per acre, use the following 2-step method:

- A. Determine the pounds of Metolachlor applied as this product (1 qt. = 0.6 lb. of Metolachlor); then,
- B. If Metolachlor, is to be used, add the pounds a.i. to be applied in these products to the pounds in Step A above.]
- (2) 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: This Product – Early Pre-plant Application – Corn

	Single Application of This P Single Application (Qt./A.)		
Soil Texture***	of This Product (Qt./A)	30 to 45 DBP**	At Planting
COARSE: Sand, Loamy sand, Sandy loam	2.0	DO NOT APPLY	

MEDIUM: Loam, Silt			
loam, Silt	2.0 <sup>A</sup>	1.4 <sup>A</sup>	0.6 <sup>A</sup>
	2.0 to 2.5 <sup>B</sup>	1.4 to 1.7 <sup>в</sup>	0.6 to 0.8 <sup>B</sup>
FINE: Sandy clay loam, Silty clay loam, Clay loam, Silty clay, Sandy clay, Clay	2.0 <sup>A</sup>	1.4 <sup>A</sup>	0.6 <sup>A</sup>
<b>y y</b> , <b>y y</b> , <b>y</b>	2.5 <sup>B</sup>	1.7 <sup>в</sup>	0.8 <sup>B</sup>

Split applications can be made less than 30 days before planting.

\*\* DBP - Days before planting.

\*\*\* Do not use on peat or muck soils.

- 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.

**Use Restriction:** Do not graze or feed forage from treated areas for 60 days following application.

## Early Pre-Plant – Sorghum (Seed Treated with Concep or Screen)

For minimum tillage and no-tillage systems only, this product may be applied 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 to 45 days before planting with two-thirds of the specified rate applied initially and the remaining one-third at planting. Applications made less than 30 days prior to 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 the label up to the 2 leaf stage of development. The addition of a 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 such as Paraquat (e.g., Quik-Quat, Gramoxone), glyphosate (e.g., Imitator, Roundup) or Glyphosate + 2,4-D (e.g., Imitator + 2,4-D, Landmaster BW). It is the pesticide user's responsibility to ensure that all products in the tank-mixtures 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 and precautionary language of the products in the mixture.

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. Do not use on coarse soils. Do not use on medium soils with less than 1.0% organic matter.

On medium and fine textured soils following final seed bed preparation in the Blacklands, Panhandle, and Gulf Coast areas of TX, an early pre-plant application of this product at 1.6 to 1.9 quarts per acre may be made 30 to 45 days before planting. Grass suppression of 2 to 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 Metolachlor product (e.g., Me-Too-Lachlor II, Dual II Magnum) may be needed in fields with a history of heavy grass pressure. Apply after planting, but before Sorghum and grass weeds emerge.

Note: (1) Do not use on soils with a pH greater than 8.0 if Grain Sorghum is to be planted. (2) If a follow-up application of a Metolachlor product (e.g., Me-Too-Lachlor II, Dual II Magnum) is needed do not exceed 1.4 pounds of Metolachlor a.i. per acre including early pre-plant applications of this product on medium textured soils. On fine textured soils, do not exceed 1.6 pounds of Metolachlor a.i. per acre.

## Table 2: This Product – Early Pre-plant – Grain or Forage Sorghum (Seed Treated with Concep or Screen)

Soil Texture	Organic Single Matter Application		Split Application of This Product* (Qt./A)		
	Content	of This Product (Qt./A)	30 to 45 DBP**	At Planting	
COARSE: Sand, Loamy sand, Sandy loam	Any level	DO NOT APPLY	DO NO	OT APPLY	
	> 1% <sup>A</sup>	2.1 <sup>A</sup>	1.4 <sup>A</sup>	0.7 <sup>A</sup>	
MEDIUM: Loam, Silt loam, Silt	< 1% <sup>B</sup>	DO NOT APPLY	DO NOT APPLY	DO NOT APPLY	
	> 1% <sup>B</sup>	2.1 to 2.33 <sup>B</sup>	1.4 to 1.6 <sup>B</sup>	0.7 to 0.8 <sup>B</sup>	
FINE: Sandy clay loam, Silty clay loam, Clay	> 1% <sup>A</sup>	2.1 <sup>A</sup>	1.4 <sup>A</sup>	1.7 <sup>A</sup>	
loam, Silty clay, Sandy clay, Clay	1.0% to 1.5% <sup>₿</sup>	2.1 to 2.33 <sup>B</sup>	1.4 to 1.6 <sup>B</sup>	0.7 to 0.8 <sup>B</sup>	
oldy, oldy	> 1.5% <sup>B</sup>	2.33 to 2.58 <sup>B</sup>	1.6 to 1.75 <sup>B</sup>	0.8 to 0.9 <sup>B</sup>	

\* Split applications can be made less than 30 days before planting.

\*\* DBP - Days before planting.

**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.

## Pre-plant Surface, Pre-plant Incorporated or Pre-emergence (Corn or Sorghum Seed Treated with Concep or Screen)

Apply this product 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:** Apply uniformly 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**.

**Pre-plant Incorporated:** Apply to the soil and incorporate into the top 2 inches 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, apply and incorporate after bed formation.

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

## Table 3: This Product – Pre-plant Surface, Pre-plant Incorporated or Pre-emergence Application – Corn

	Broadcast Rate of This Product (Qt./A)		
Soil Texture	Less than 3% Organic Matter	3% Organic Matter or Greater	

COARSE: Sand, Loamy sand, Sandy	1.3	1.6
loam		
MEDIUM: Loam, Silt loam, Silt	1.6	2.0
FINE: Sandy clay loam,		2.0 <sup>A</sup>
Silty clay loam, Clay loam,	2.0	2.0 to 2.5 <sup>B*</sup>
Silty clay, Sandy clay, Clay		
Muck or Peat Soils (more than 20%	DON	NOT USE
organic matter)		

**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. \* For Cocklebur, Yellow nutsedge, and Velvetleaf control on fine textured soils above 3% organic matter, apply 2.5 qt. of this product per acre.

**Notes:** (1) In the event of escape of annual weeds following an early pre-plant, pre-plant surface, preplant incorporated, or pre-emergence treatment of this product applied alone or in combination, follow with a post-emergence application of an appropriately labeled broadleaf and/or grass weed herbicide, i.e., Atrazine (e.g., Atrazine 4L or 90DF), Primisulfuron (e.g., Beacon), Dicamba (e.g., Banvel), Bentazon (e.g., Basagran), Bromoxynil (e.g., Brominal, Buctril), Prosulfuron + Primisulfuron (e.g., Exceed), Dicamba + Atrazine (e.g., Marksman) or 2,4-D (e.g., De-Amine, De-Ester). If the post-emergence treatment includes the herbicide used in the earlie treatment, do not exceed the labeled rate for Corn on a given soil texture. (2) Bromoxynil (e.g., Brominal, Buctril) may be applied post-emergence alone or in tank-mix combination with Atrazine. Do not exceed 1.2 pounds of the active ingredient Atrazine per acre in tank-mix combination with Bromoxynil (e.g., Brominal, Buctril) post-emergence. Refer to the Atrazine and Bromoxynil (e.g., Brominal, Buctril) labels for specific rates and precautions. (3) If Atrazine and/or Simazine or another product containing Atrazine and/or Simazine are used post-emergence following application of this product, do not exceed a total of 2.5 pounds of Atrazine and/or Simazine are for Simazine combined per acre per year. (4) 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 noted in the "THIS PRODUCT IN TANK-MIXTURE" section of this label.

## Table 4: This Product Pre-Plant Surface, Pre-Plant Incorporated or Pre-emergence – Grain or Forage Sorghum\* (Seed Treated with Concep or Screen)

Soil Texture	Organic Matter	Broadcast Rate of This Product (Qt./A)		
COARSE: Sand, Loamy sand, Sandy	Any level	DO NOT APPLY		
loam				
MEDIUM: Loam, Silt Ioam, Silt	Less than 1.0%	DO NOT APPLY		
	More than 1.0%	1.6 to 2.1		
*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.				

**Note:** Substitute a fluid fertilizer from 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 a crop oil concentrate to the spray mixture will enhance the burndown activity if larger weeds are present at the time of treatment, and a contact herbicide as noted in the *"THIS PRODUCT IN TANK-MIXTURE"* section of this label.

## Use Precautions:

- Injury may occur if this product is applied both early pre-plant, pre-plant surface, pre-plant incorporated or preemergence and an at-planting systemic insecticide is applied in furrow are used.
- In addition, Sorghum growing under stress caused by minor element deficiency may be injured by this product.

## Use Restrictions:

- Do not graze or feed forage from pre-emergent treated areas for 60 days following application.
- Do not apply this product on highly alkaline soils (pH greater than 8.0) or on eroded areas where calcareous subsoils are exposed.
- Do not apply this product when Sorghum is planted in deep furrows because heavy rains following application can cause excessive concentrations of herbicide in the furrow.
- Do not apply to Sorghum grown under mulch tillage.

## **Post-emergence Broadcast Application – Corn**

Weeds Controlled		Weeds Partially Controlled
Barnyardgrass (Watergrass)	Lambsquarters	Yellow nutsedge
Cocklebur	Morningglory	
Common ragweed	Mustard	
Crabgrass	Pigweed	
Crowfootgrass	Prickly sida	
Fall panicum	Purslane	
Flixweed	Smartweed	
Giant foxtail	Velvetleaf	
Green foxtail	Waterhemp	
Jimsonweed	Yellow foxtail	
Kochia		

**Application:** Apply early post-emergence, using the appropriate rate from **Table 5**. Apply this treatment before grass and broadleaf weeds pass the 2 leaf stage and before Corn reaches 12 inches in height. Application to weeds larger than the 2 leaf stage will generally result in unsatisfactory control. Occasional Corn leaf burn may result, but this should not affect later growth or yield. Do not apply post-emergence in fluid fertilizer or severe crop injury may occur.

## Table 5: Post-emergence Broadcast Application – Corn

Soil Texture	Broadcast Rate of This Product (Qt./A)	
COARSE: Sand, Loamy sand, Sandy loam	1.6	
MEDIUM: Loam, Silt loam, Silt	2.0	
FINE: Sandy clay loam, Silty clay loam, Clay loam, Silty clay,	2.0 to 2.5*	
Sandy clay, Clay		
* For better residual control of Cocklebur, Velvetleaf, and Yellow nutsedge on fine textured soils above 3% organic matter, apply 2.5 qt. of this product per acre.		

**Use Restrictions:** (1) If this product has been applied early pre-plant, pre-plant surface, pre-plant incorporated, or pre-emergence, do not exceed an application rate of 2 pounds Atrazine and/or Simazine active ingredient for any single application per acre, and the total pounds of Atrazine and/or Simazine (lb. a.i./A) must not exceed 2.5 pounds of combined active ingredients per year. (2) If Atrazine and/or Simazine or Atrazine plus Metolachlor tank-mixtures have been applied early pre-plant, pre-plant surface, pre-plant incorporated, or pre-emergence, limit this product early post-emergent application not to exceed a total of 2.5 pounds of Atrazine and/or Simazine for tank-mixtures have been applied early pre-plant, pre-plant surface, pre-plant incorporated, or pre-emergence, limit this product early post-emergent application not to exceed a total of 2.5 pounds of Atrazine and/or Simazine combined or 3.75 pounds of the active ingredient in Metolachlor products or its component in this product per acre on a Corn crop or illegal residues may result. (3) Do not use on peat or muck soils. Do not graze or feed forage from treated areas for 60 days following application.

**Rotational Crops:** Follow the preceding crop rotation instructions for *"THIS PRODUCT APPLIED ALONE - CORN (FIELD, POP, SWEET), GRAIN SORGHUM OR FORAGE SORGHUM"* section.

## **Post-emergence Directed Application – Corn**

This product may be applied at 1.3 to 2.5 quarts per acre in a minimum of 15 gallons of water as a postemergence directed treatment 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. Apply using the appropriate rate from **Table 6**. For best results, apply this product 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 this product application, apply before grass and broadleaf weeds exceed the 2-leaf stage. Application to weeds larger than the 2-leaf stage will generally give unsatisfactory control. Apply to Corn not exceeding 12 inches in height. Minimize contact with Corn leaves. Do not apply post-emergence in fluid fertilizer, or severe crop injury may occur.

Soil Texture	Broadcast Rate of This Product (Qt./A)	
COARSE: Sand, Loamy sand, Sandy loam	1.3	
MEDIUM: Loam, Silt Ioam, Silt	2.0	
FINE: Sandy clay loam, Silty clay loam, Clay loam, Silty clay,	2.0 to 2.5*	
Sandy clay, Clay		
* For better residual control of Cocklebur, Velvetleaf, and Yellow nutsedge on fine textured soils above 3% organic		
matter, apply 2.5 qt. of this product per acre.		

## Table 6: Post-emergence Directed Application – Corn

**Use Restrictions:** (1) If this product has been applied early pre-plant, pre-plant surface, pre-plant incorporated, or pre-emergence, do not exceed a combined application rate of 2.0 pounds of combined Atrazine and/or Simazine active ingredient per acre for any single application, and the total pounds of Atrazine and/or Simazine applied (Ib./A) must not exceed 2.5 pounds combined active ingredients per year. (2) If Atrazine and/or Simazine or Atrazine plus Metolachlor tank-mixtures have been applied pre-plant surface, pre-plant incorporated or pre-emergence, limit the post-directed application of this product not to exceed a total of 2.5 pounds of Atrazine and/or Simazine and/or Simazine active ingredient or 3.75 pounds of the active ingredient in Metolachlor product or its component in this product per acre on a Corn crop, or illegal residues may result. (3) To avoid possible illegal residues, do not graze or feed forage from treated areas for 60 days following application. Do not use on peat or muck soils.

## THIS PRODUCT IN TANK-MIXTURE

## **Use Restrictions**

- When tank-mixing or sequentially applying products containing Atrazine in Sorghum or Atrazine and/or Simazine to Corn, do not exceed an application rate of 2 pounds of either active ingredient alone or a combination of both active ingredients per acre for any single application, and the total pounds of Atrazine and/or Simazine applied (Ib./A) must not exceed 2.5 pounds of the combined active ingredients per year.
- Applications using mechanically pressurized handguns to Sweet corn is prohibited.
- Do not graze or feed forage from treated areas for 60 days following application for all types of Corn except Sweet Corn. For Sweet Corn, do not graze or feed forage from treated areas for 45 days following application.
- Do not apply Atrazine and Propazine containing products to the same Sorghum area.

**Note:** For purposes of calculating total Atrazine active ingredient applied, this product contains 3.1 pounds of Atrazine a.i. per gallon (0.775 lb. a.i./qt.).

On highly erodible land with less than 30% plant residue cover prior to crop emergence	1.6 lb. Atrazine and/or Simazine combined a.i. per acre as single broadcast spray	
On other land prior to crop emergence	2 lb. Atrazine and/or Simazine combined a.i. per acre as single pre-emergence application	
Post-emergence application only	2 lb. Atrazine and/or Simazine combined a.i. per acre as single post-emergence application	
Pre-emergence + Post-emergence applications	Total of 2.5 lb. Atrazine and/or Simazine combined a.i. per acre per year	

It is the pesticide user's responsibility to ensure that all products in the tank-mixtures 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 and precautionary language of the products in the mixture.

## CORN TANK-MIXTURES

## Tank-mixture with Atrazine, Metolachlor, Simazine or Isoxaflutole (e.g., Balance) — Conventional Tillage

**Note:** Check the compatibility of this product in tank-mixture with Balance before mixing in spray tank by using the procedure described under "APPLICATION IN WATER OR FLUID FERTILIZERS".

It is the pesticide user's responsibility to ensure that all products in the tank-mixtures 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 and precautionary language of the products in the mixture.

Atrazine (4L or 90DF): Add the label specified rate for Atrazine 4L or Atrazine 90DF per acre to the rate not to exceed 1.5 pounds Atrazine a.i. in **Table 3** 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.

DO NOT exceed the maximum amount of Atrazine and/or Simazine specified at the beginning of "THIS PRODUCT IN TANK-MIXTURE" section when tank-mixing or sequentially applying Atrazine.

**Metolachlor (e.g., Me-Too-Lachlor II, Dual II Magnum):** When heavy infestations of Yellow nutsedge, Sandbur or seedling Johnsongrass are expected, add Metolachlor to the rate of this product not to exceed 2.75 pounds Metolachlor a.i. in **Table 3**.

**Simazine (4L or 90DF):** Add the label specified rate of Simazine 4L or Simazine 90DF per acre to the rate not to exceed 1.5 lbs. Simazine a.i. in **Table 3** where heavy infestations of Crabgrass or Fall panicum are expected or additional control of certain broadleaved weeds is desired.

DO NOT exceed the maximum amount of Atrazine and/or Simazine specified at the beginning of "THIS PRODUCT IN TANK-MIXTURE" section when tank-mixing or sequentially applying Simazine.

**Isoxaflutole (e.g., Balance) - Field Corn Only:** The tank-mixture of this product plus Isoxaflutole provides control of weeds listed on this product's label, certain weed biotypes resistant to ALS-inhibitor herbicides and to triazine herbicides, Velvetleaf, and others on the respective product labels. Isoxaflutole 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 preemergence in conventional tillage, conservation tillage, and no-till systems. Refer to *"TABLE 1: THIS PRODUCT* - *EARLY PRE-PLANT APPLICATION"* for the early pre-plant application rate (8 to 14 days before planting) or refer to **Table 3** for the appropriate rate for pre-plant (surface applied 0 to 7 days before planting), pre-plant incorporated or pre-emergence application.

Where difficult species and/or severe weed populations are expected, use the maximum rates of this product and Isoxaflutole where rate ranges are listed for this tank-mixture.

## Tank-mixture of This Product Alone or This Product + Atrazine (e.g., Atrazine 4L or 90DF), Isoxaflutole (e.g., Balance), Metolachlor (e.g., Me-Too-Lachlor II) or Simazine (e.g., Simazine 4L of 90DF) with Paraquat (e.g., Quik-Quat, Gramoxone), Glyphosate + 2,4-D (e.g., Imitator + 2,4-D, Landmaster BW), Glyphosate (e.g., Imitator, Roundup) for Minimum Tillage or No-Tillage Systems

In minimum tillage or no-tillage systems where Corn is planted directly into a cover crop, stale seedbed, established sod or previous crop residues, tank-mix Paraquat, Glyphosate + 2,4-D or Glyphosate contact herbicides with this product alone or with this product plus Atrazine, Balance, Metolachlor or Simazine.

It is the pesticide user's responsibility to ensure that all products in the tank-mixtures 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 and precautionary language of the products in the mixture.

When used as directed, the Paraquat portion of the tank-mixture controls most emerged annual weeds and suppresses many perennial weeds. 2,4-D + Glyphosate or Glyphosate combinations will control emerged annual and perennial weeds when applied as directed on its label. The tank-mixture portion of this product provides preemergence control of the weeds listed on this label in *"THIS PRODUCT ALONE"* section. The addition of Atrazine, Isoxaflutole, Metolachlor, or Simazine offers the advantage indicated for each under *"Tank-mixture with Atrazine, Metolachlor, Simazine or Isoxaflutole (e.g., Balance) – Conventional Tillage"* section.

**Application:** Apply this product before, during or after planting, but before Corn emerges at the appropriate rate in **Table 7**. Atrazine 4L or Atrazine 90 DF not to exceed 0.5 pound Atrazine a.i. per acre may be added to the rate of up to 2 quarts of this product in **Table 7** to total 1.5 pounds Atrazine a.i or appropriate rate of Isoxaflutole (refer to *"Isoxaflutole (e.g., Balance) - Field Corn Only"* section) or Metolachlor, or appropriate rate of Simazine 4L or Simazine 90DF to total 1.5 pounds Simazine a.i. in **Table 7**. Add Paraquat (e.g., Quik-Quat, Gramoxone), Glyphosate + 2,4-D (e.g., Imitator + 2,4-D, Landmaster BW) or Glyphosate (e.g., Imitator, Roundup) labeled rates.

When tank-mixing or sequentially applying Atrazine 4L or Atrazine 90DF with this product, DO NOT exceed the maximum amount of Atrazine and/or Simazine specified at the beginning of *"THIS PRODUCT IN TANK-MIXTURE"* section. **Tank-mixtures with Isoxaflutole can be used only on Field Corn.** Apply in 20 to 60 gallons of water per acre with conventional spray equipment.

## Tank-mixture of This Product Alone or This Product + Atrazine (e.g., Atrazine 4L or 90DF) or Isoxaflutole (e.g., Balance), with 2,4-D (e.g., De-Amine) or 2,4-D + Dicamba (e.g., Dicamba De-Amine, WeedMaster) for Minimum Tillage or No-Tillage Systems

In minimum tillage or no-tillage systems where Corn is planted directly into a cover crop, stale seedbed, established sod or previous crop residues, this product may be applied in combination with Atrazine or Isoxaflutole. When used as directed, the tank-mixture portion of this product provides pre-emergence control of the weeds listed on this label in the *"THIS PRODUCT ALONE"* section. The addition of Atrazine or Isoxaflutole offers the advantage indicated for each under *"Tank-mixture with Atrazine, Metolachlor, Simazine or Isoxaflutole (e.g., Balance) – Conventional Tillage"* section.

It is the pesticide user's responsibility to ensure that all products in the tank-mixtures 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 and precautionary language of the products in the mixture.

**Application:** Apply this product before, during or after planting, but before Corn emerges at the appropriate rate in **Table 7.** Atrazine 4L or Atrazine 90 DF at the rate of 0.5 pound Atrazine a.i. per acre may be added to the rate of up to 2 quarts of this product in **Table 7** to total 1.5 pounds Atrazine or appropriate rate of Isoxaflutole (refer to "Isoxaflutole (e.g., Balance) - Field Corn Only" section) per acre may be added to the rate of this product in **Table 7**.

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 gallons 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 Surf-AC<sup>®</sup> 820 surfactant at 1 to 2 quarts per 100 gallons of diluted spray or another surfactant cleared for use on growing crops at its label specified rate. Apply before weeds exceed 3 inches in height. If Alfalfa is present, add appropriate rate of Dicamba (e.g., Banvel) to the spray mixture per acre and apply before Alfalfa exceeds 6 inches in height.

For fields with existing sod grasses (e.g., Bromegrass, Orchardgrass, Rye or Timothy), when existing weeds exceed 3 inches in height or when very dry conditions exist, add Paraquat (e.g., Quik-Quat, Gramoxone) at the label rate in place of or in addition to 2,4-D (e.g., De-Amine) as indicated above. Do not apply Paraquat in suspension-type liquid fertilizer. It is the pesticide user's responsibility to ensure that all products in the tank-mixtures 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 and precautionary language of the products in the mixture.

**Note:** When tank-mixing or sequentially applying Atrazine 4L or Atrazine 90DF with this product, DO NOT exceed the maximum amount of Atrazine and/or Simazine specified at the beginning of "THIS PRODUCT IN TANK-MIXTURE" section.

Table 7. This Product for Minimum Thiage of No-Thiage Application – Com				
Soil Texture	Broadcast Rate of This Product (Qt./A)			
COARSE: Sand, Loamy sand, Sandy loam	1.6			
MEDIUM: Loam, Silt loam, Silt	2.0			
FINE: Sandy clay loam, Silty clay loam, Clay loam, Silty clay,	2.0 <sup>A</sup>			
Sandy clay, Clay	2.0 to 2.5 <sup>₿</sup> *			
Muck or Peat Soils (more than 20% organic matter)	DO NOT USE			

Table 7: This Product for Minimum Tillage or No-Tillage Application – Corn

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. \*For Cocklebur, Vellow putsedge, and Velvetleaf control on fine textured.

B. Use these rates for all other applications. \*For Cocklebur, Yellow nutsedge, and Velvetleaf control on fine-textured soils above 3% organic matter, apply 2.5 qt. of this product per acre.

## Tank-mixture with Linuron for Control of Lambsquarters, and Pigweed

For prolonged control of Lambsquarters and Pigweed in DE, MD, NJ, NY, PA, VA, and WV, this product may be applied pre-emergence in combination with Linuron. Apply this product according to the rates in **Table 3** and label specified rates of Linuron.

It is the pesticide user's responsibility to ensure that all products in the tank-mixtures 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 and precautionary language of the products in the mixture.

**Rotational Crops:** Follow the crop rotation instructions in the "THIS PRODUCT APPLIED ALONE — CORN (FIELD, POP, SWEET), GRAIN SORGHUM OR FORAGE SORGHUM" section.

## Tank-mixture with Mesotrione (e.g., Mesotryone<sup>™</sup> 4L, Callisto<sup>®</sup>) – For Use in Field Corn, Production Seed Field Corn, Field Corn Grown for Silage, Yellow Popcorn, and Sweet Corn

For pre-emergence control of weeds in Corn, this product may be applied in combination with Mesotrione. Apply this product according to the rates in **Table 3** of this label and Mesotrione label specified rates.

Observe all directions for use, use precautions, and limitations on the respective product labels when applying these products in tank-mix combination. Observe the most restrictive directions for use, use precautions, and restrictions on the labels for the two products involved in this tank-mix.

## POST-EMERGENCE IN FIELD CORN TANK-MIXTURES

For post-emergence control of weeds in specific types of Field corn, the combinations listed below with this product 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.

**Notes:** (1) It is the pesticide user's responsibility to ensure that all products in the tank-mixtures 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 and precautionary

language of the products in the mixture. (2) Do not use fluid fertilizer with these mixtures or Corn injury may occur. (3) For each tank-mixture with this product, apply only to the specific Field corn type specified on the tank-mix product label. (4) In-row weed control may be reduced because of lack of coverage when applied to Corn over 4 inches tall. (5) Post-emergence applications to Corn must be made before crop reaches 12 inches in height.

A. This Product + Glufosinate (e.g., Liberty Herbicide): Post-emergence Use in Glufosinate Tolerant Corn (e.g., LibertyLink) – The tank-mixture of this product + Glufosinate can be applied post-emergence to weeds and Corn from seed tolerant to Glufosinate. Glufosinate provides post-emergence control of a broad spectrum of grass and broadleaf weeds and this product provides residual control of grasses and broadleaf weeds listed in the label section "THIS PRODUCT APPLED ALONE – CORN (FIELD, POP SWEET), GRAIN SORGHUM OR FORAGE SORGHUM". For the proper rate of this product applied post-emergence with Glufosinate refer to Table 3 and use the minimum rate per soil texture for season-long residual control. Refer to the Glufosinate label for 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 Glufosinate labeled rate to control the species and growth stages present.

**B.** This Product + Glyphosate (e.g., Imitator, Roundup) for Post-emergence Application to Glyphosate Tolerant Corn (e.g., Roundup Ready) – The tank-mixture of this product + Glyphosate can be applied post-emergence to weeds and to Glyphosate tolerant Corn. Application may be applied post-emergence to Glyphosate tolerant Corn up to 12 inches in height. This mixture will provide post-emergence control of weed species on the Glyphosate product label and also residual control of weed species on this product label. Use the minimum rate of this product post-emergence with a Glyphosate product in Glyphosate tolerant Corn as specified in **Table 3** of this label according to soil texture. Refer to the supplemental labeling of Glyphosate product for post-emergence application to Glyphosate tolerant Corn and to each product label and follow all appropriate use directions application procedures, use precautions, and limitations. Apply labeled rates of Glyphosate to control listed broadleaf and grass weeds. Refer to the Glyphosate product label for directions to control problem species.

Where difficult species and/or severe weed populations are expected, use the maximum rate where rate ranges are listed.

**C. This Product + Prosulfuron + Primsulfuron (e.g., Exceed)** – Apply 1.33 to 1.75 quarts per acre of this product + labeled rates of Prosulfuron + Primisulfuron on Corn that is 4 to 12 inches tall. The application may be broadcast, semi-directed, or directed. The rate of this product is based on soil texture with 1.33 quarts per acre on coarse and 1.75 quarts per acre on medium and fine soils. Do not use on peat or muck soils. Add a non-ionic surfactant at 0.25% v/v.

This mixture is effective for control of many annual 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 Nicosulfuron (e.g., Accent).

**D.** This Product + Prosulfuron + Primsulfuron (e.g., Exceed) + Nicosulfuron (e.g., Accent) – Apply the labeled rate of Prosulfuron + Primisulfuron. Add Nicosulfuron for more effective control of certain annual grasses. Apply to Field corn between 4 and 12 inches. Add a non-ionic surfactant at 0.25% v/v. The use of fertilizer or crop oil concentrate with this combination may cause injury to Corn.

**E. This Product + Prosulfuron + Primsulfuron (e.g., Spirit**<sup>™</sup>) – Prosulfuron + Primsulfuron (e.g., Spirit) can be substituted in place of Prosulfuron + Primisulfuron (e.g., Exceed) in the above combinations in Field corn only.

**Note:** Do not use fertilizer or crop oil concentrate with these mixtures or injury to Field corn may occur. The combination of this product 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. To the extent consistent with applicable laws, Buyer assumes all risks of use,

not in strict accordance with directions given herewith. [It should be noted that early pre-plant, pre-plant incorporated or pre-emergence control of these weeds would usually provide more timely weed control resulting in higher yields than total post-emergence treatments.]

## **Mixing Order**

Add these products (Tank-mixtures C, D, and E) to the tank-mix in the following order:

- 1. Products in water-soluble bags should be added first.
- 2. This Product
- 3. Additives

**Use Precautions:** (1) It is the pesticide user's responsibility to ensure that all products in the tank-mixtures 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 and precautionary language of the products in the mixture. When this product is applied after June 10, crop injury may occur the following year if you rotate to crops other than Corn or Sorghum. (2) In-row weed control may be reduced because of lack of coverage when applied to Corn over 4 inches tall.

**Use Restriction:** Do not graze or feed forage from treated areas for 60 days following Field corn postemergence application of this product in tank-mixture.

## GRAIN AND FORAGE SORGHUM (SEED TREATED WITH CONCEP OR SCREEN) TANK-MIXTURES

# Tank-mixture with Metolachlor (e.g., Me-Too-Lachlor, Dual II Magnum) with Paraquat (e.g., Quik-Quat, Gramoxone), Glyphosate + 2,4-D (e.g., Imitator + 2,4-D, Landmaster BW), Glyphosate (e.g., Imitator, Roundup) 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 Paraquat , 2,4-D + Glyphosate or Glyphosate may be tank-mixed with this product. When used as directed, the Paraquat portion of the tank-mixture controls most emerged annual weeds and suppresses many perennial weeds. 2,4-D + Glyphosate combinations will control emerged annual and perennial weeds when applied as directed on its label. The Metolachlor portion of the tank-mixture provides pre-emergence control of the weeds listed on this label in the *"THIS PRODUCT APPLIED ALONE — CORN (FIELD, POP, SWEET), GRAIN SORGHUM OR FORAGE SORGHUM"* section.

It is the pesticide user's responsibility to ensure that all products in the tank-mixtures 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 and precautionary language of the products in the mixture.

**Application:** Apply before, during or after planting, but before Grain Sorghum emerges at the appropriate rate in **Table 8.** Add Paraquat, 2,4-D + Glyphosate or Glyphosate at labeled rates.

Apply in a minimum of 20 gallons of water per acre with conventional spray equipment.

## Table 8: This Product for Minimum Tillage or No-Tillage Grain Sorghum\* (Seed treated with Concep or Screen)

Soil Texture	Organic Matter	Broadcast Rate Of This Product (Qt./A)
COARSE: Sand, Loamy sand, Sandy loam	Any level	DO NOT APPLY
MEDIUM: Loam, Silt loam, Silt	Less than 1.0%	DO NOT APPLY
	1.0 to 1.5%	1.6
	More than 1.5%	1.6 to 2.1

\* 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.

## **Use Precautions:**

- Injury may occur if this product is applied both early pre-plant, pre-plant surface, pre-plant incorporated or preemergence and an at-planting systemic insecticide is applied in furrow are used.
- In addition, Sorghum growing under stress caused by minor element deficiency may be injured by this product.

## **Use Restrictions:**

- Do not apply this product on highly alkaline soils (pH greater than 8.0) or on eroded areas where calcareous subsoils are exposed.
- Do not apply this product when Sorghum is planted in deep furrows because heavy rains following application can cause excessive concentrations of herbicide in the furrow.
- Do not apply to Sorghum grown under mulch tillage.
- Do not graze or feed forage from pre-emergent treated areas for 60 days following application.

**Rotational Crops:** Follow the crop rotation instructions in the "THIS PRODUCT APPLIED ALONE — CORN (FIELD, POP, SWEET), GRAIN SORGHUM OR FORAGE SORGHUM" section.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Storage should be under lock and key in a ventilated room and secure from access by unauthorized persons and children. Storage should be in a cool, dry area away from any heat or ignition source. Do not stack containers over 2 pallets high. Move containers by handles or cases. Do not move containers from one area to another unless they are securely sealed. Keep containers tightly sealed when not in use. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Avoid contamination with oxidizing materials. Store in original containers only. If the contents are leaking or material is spilled, follow these steps:

- 1. Contain spill. Absorb with a material such as sawdust, clay granules or dirt.
- 2. Collect and place in suitable containers for disposal.
- 3. Wash area with soap and water to remove remaining pesticide.
- 4. Follow washing with clean water rinse.
- 5. Place a leaking container in a plastic tub and transfer contents, as soon as possible, to an empty, original container.
- 6. Do not allow runoff to enter sewer or contaminate water supplies.
- 7. Dispose of waste as indicated below.

**PESTICIDE DISPOSAL:** To avoid waste, use all materials in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often, such programs are run by State or local governments or by industry).

#### CONTAINER HANDLING:

**Nonrefillable Container (rigid material;**  $\leq$  5 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**Nonrefillable Container (rigid material; > 5 gallons up to < 250 gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth 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. 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. Dispose of empty container in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**Refillable Container** (≥ 250 gallons & Bulk): Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% 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.

## WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller. To the extent consistent with applicable laws, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable laws, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

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