

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

November 10, 2021

Karina Castro Federal Regulatory Manager Makhteshim Agan of North America, Inc. (d/b/a ADAMA) 3120 Highwoods Blvd., Suite 100 Raleigh, NC 27604

Subject: Registration Review Label Amendments Incorporating Mitigation Measures from the Atrazine and Metolachlor/S-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*: Parallel Plus *EPA Registration Number*: 66222-132 *Application Dates*: December 14, 2020 and May 17, 2021 *Decision Numbers*: 568755 and 575840

Dear Ms. Castro:

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/S-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 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

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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 Ana Pinto by at pinto.ana@epa.gov.

Sincerely,

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

Enclosure

#### RESTRICTED USE PESTICIDE (DUE TO 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.

METOLACHLORGROUP15HERBICIDEATRAZINEGROUP5HERBICIDE

# Parallel <sup>®</sup> PLUS

• Herbicide

#### • For Weed Control in Corn and Grain or Forage Sorghum

ACTIVE INGREDIENTS:	% BY WT.
Atrazine: 2-chloro-4-ethylamino-6-isopropylamino-s-triazine	
Atrazine related compounds:	0.5%
Metolachlor: 2-chloro-N-(2-ethyl-6-methylphenyl)N-(2 methoxy-1-methylethyl)acetamide	
OTHER INGREDIENTS:	
	<b>TOTAL</b> 100.0%

Parallel Plus contains 2.8 lbs. atrazine active ingredient + related compounds per gallon and 2.7 lbs. metolachlor active ingredient per gallon.

### KEEP OUT OF REACH OF CHILDREN CAUTION

Manufactured for: Makhteshim Agan of North America, Inc. (d/b/a ADAMA). 3120 Highwoods Blvd, Suite 100 Raleigh, NC 27604 How can we help? 1-866-406-6262 **A C C E P T E D** 11/10/2021

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

66222-132

EPA Reg. No.66222-132

NET CONTENTS:

EPA Est. No.

	FIRST AID	
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.	
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.	
	Call a poison control center or doctor for treatment advice.	
IF ON SKIN OR	Take off contaminated clothing.	
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.	
	Call a poison control center or doctor for treatment advice.	
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 by a poison control center or doctor.	
	DO NOT give anything by mouth to an unconscious person.	
IF INHALED:	Move person to fresh air.	
	• If person is not breathing, call 911 or an ambulance, then give artificial respiration,	
	preferably mouth-to-mouth if possible.	
	Call a poison control center or doctor for further 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 conta	ct 1-877-250-9291 for emergency medical treatment information.	

[OPTIONAL TEXT: For additional Precautionary Statements, handling, Directions for Use, (and Storage and Disposal), see inside of this booklet.]

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. Wear protective eyewear or clothing specified in the PPE section below.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

#### Mixers, loaders, applicators, flaggers, and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, and viton ≥ 14 mils
- Shoes plus socks
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when mixing/loading, cleaning up spills, cleaning equipment, or otherwise exposed to the concentrate

See engineering controls for additional requirements.

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

**ENGINEERING CONTROLS:** Mixers and loaders supporting aerial applications **at a rate greater than 3 lb. ai atrazine/A** must use a closed system that meets the requirements for dermal protection listed in the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240 (d)(4)]and must:

--wear the personal protective equipment required for mixers and loaders,

--wear protective eyewear if the system operates under pressure, and

--be provided and have immediately available for use in an emergency, such as a spill or equipment breakdown: chemical resistant footwear.

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 **DO NOT** need to wear chemical-resistant gloves when using an enclosed cockpit.

Flaggers supporting aerial applications must use an enclosed cab that meets the definition of the Worker Protection Standard 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 Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### Users should:

#### USER SAFETY RECOMMENDATIONS

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

#### **ENVIRONMENTAL HAZARDS**

Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable, i.e., welldrained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

This product must not be mixed or loaded within 50 ft. of intermittent streams and rivers, natural or impounded lakes and reservoirs. This product must not be applied within 66 ft. of points where field surface water runoff enters

perennial or intermittent streams and rivers or within 200 ft. of natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66-ft. buffer or setback from runoff entry points must be planted to crop, seeded with grass, or other suitable crop.

This product must not be mixed or loaded or used within 50 ft. of all wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 ft. of any well are prohibited, unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rain water that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities **DO NOT** apply to vehicles when delivering pesticide to the mixing/loading sites.

Additional state imposed requirements regarding well-head setbacks and operational area containment must be observed.

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

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

Metolachlor is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

#### Ground Water Advisory

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 ground water. 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 applications when rainfall or irrigation is expected to occur within 48 hours.

This pesticide is toxic to aquatic invertebrates. **DO NOT** apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. **DO NOT** 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 disposing of equipment wash waters.

**NON-TARGET ORGANISM 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.

#### **Reporting Ecological Incidents:**

To report ecological incidents, including mortality, injury, or harm to plants and animals, call 1-866-406-6262.

#### **DIRECTIONS FOR USE**

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

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

#### 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 http://www.epa.gov/espp/, call 1-844-447-3813, or email ESPP@epa.gov. You must use the Bulletin valid for the month in which you will apply the product.

#### RESTRICTIONS

- Not for use in the states of Hawaii or Alaska, or in the U.S. territories (Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands, and the North Mariana Islands).
- Use on roadsides; Conservation Reserve Program (CRP) land; conifers, including Christmas Tree plantings; timber; forestry; and, Miscanthus and other perennial bioenergy crops is prohibited.
- **DO NOT** apply atrazine and propazine products to the same sorghum acre.
- Users must only apply to fallow land in the following states according to the prescribed rotation pattern in the table below:

Fallow Rotation Pattern	Fallow Use Authorized in these States only
Wheat-Corn-Fallow	CO, KS, ND, NE, SD & WY
Wheat-Fallow-Wheat	CO, KS, ND, NE, SD & WY
Wheat-Sorghum-Fallow	AR, CO, GA, IL, KS, LA, MS, MO, NE, NM, NC, OK,
	SD & TX

#### AGRICULTURAL USE REQUIREMENTS

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

**DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves such as barrier laminate, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, and viton ≥ 14 mils
- Shoes plus socks

### 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 Makhteshim Agan for a refund.

#### Not for sale, use, or distribution in Nassau or Suffolk Counties, NY.

#### CHEMIGATION PROHIBITION

**DO NOT** apply this product through any type of irrigation system.

#### **GENERAL INFORMATION**

Parallel<sup>®</sup> Plus is an herbicide recommended before planting, before or after emergence for control of most annual grasses and broadleaf weeds in corn. Parallel Plus can also be used before crop emergence for control of 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 be tank mixed with other herbicides for weed control in conventional tillage corn. 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. Tank mixtures are permitted only in those states where the tank-mix partner is registered. Refer to and follow the label of each tank mix product used for precautionary statements, directions for use, geographic and other restrictions.

When tank mixing or sequentially applying atrazine or products containing atrazine to corn or sorghum **DO NOT** exceed an application rate of 2.0 pounds active ingredient of atrazine per acre for any single application and the total pounds of atrazine applied (lb. a.i. per acre) must not exceed 2.5 pounds active ingredient per acre per year.

Following many years of continuous use of atrazine (one of the active 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, we recommend the use of Parallel Plus in combination or in sequence with registered herbicides, which **DO NOT** contain triazines. Consult with your State Agricultural Extension Service for specific recommendations.

#### Precautions to observe when using this product:

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

Parallel Plus alone or in tank mixture with Atrazine, Balance, Dual Magnum, Dual II Magnum, Cycle, Parallel, Princep may be applied early preplant, preplant surface, preplant incorporated, or preemergence on corn in water or fluid fertilizer. Apply postemergence treatments of this product to corn using water only as the carrier. Parallel Plus may be applied in tank-mix combination with Gramoxone Max, Landmaster BW, Touchdown, or Roundup with or without the above herbicides preplant surface or preemergence to corn. Parallel Plus alone may also be applied on sorghum early preplant, preplant incorporated, preplant surface, or preemergence in water or in fluid fertilizer.

Parallel Plus 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. For additional information about spray drift, refer to the AERIAL SPRAY DRIFT MANAGEMENT section found elsewhere on this label.

**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 ½ 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 preemergence application of Parallel Plus or a tank mixture may reduce effectiveness. Cultivate if weeds develop in conventional tillage corn or sorghum.

Observe all precautions and limitations on the label of each product used in tank mixtures.

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.

#### **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-values or antisiphoning devices must be used on all mixing equipment.

This product must not be mixed/loaded or used within 50 ft. of all wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 ft. of any well are prohibited, unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash-water, and rain-water that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities **DO NOT** apply to vehicles when delivering pesticide shipments to the mixing/loading site.

States may have in effect additional requirements regarding wellhead setbacks and operational area containment.

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

#### TILED-OUTLETTED TERRACED FIELDS CONTAINING STANDPIPES

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

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

#### **MIXING INSTRUCTIONS**

Shake 2.5 gal. jug well or thoroughly recirculate larger containers and bulk tanks before using. Parallel Plus is a liquid that may be mixed with water or fluid fertilizer and applied as a spray. Parallel Plus 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 Parallel Plus and used to control weeds in corn or Concep-treated sorghum.

When applying Parallel Plus with dry bulk granular fertilizers, follow all directions for use and precautions on the Parallel Plus 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.

Impregnation of bulk fertilizer is restricted to commercial facilities. On-farm fertilizer impregnation is prohibited. No more than 340 tons of dry bulk fertilizer can be impregnated per worker per day. No single facility may impregnate fertilizer with this product for more than 30 days per calendar year.

The commercial facility impregnating the dry bulk fertilizer must inform, in writing, the user (applicator) of the dry bulk fertilizer that:

- Applicators must wear long-sleeved shirt, long pants, shoes, and socks
- The restricted-entry interval is 24 hours.

Prepare the herbicide/fertilizer mixture by using any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Nozzles used to spray Parallel Plus 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 6/30 particle size or of 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 Parallel Plus to be used by the following:

2,000

x qts. of Parallel Plus per acre = qts. of Parallel Plus per ton of fertilizer

lbs. of fertilizer per acre

#### 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 Parallel Plus with Exxon Aromatic 200 at a rate of 2.0-2.5 pts/gal of Parallel Plus. 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.

Mixtures of Parallel Plus and Aromatic 200 must be used on dry fertilizer only. Poor results or crop injury may result if these mixtures are used in water or liquid fertilizer solutions for spraying applications.

When impregnating Parallel Plus 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 6/30 particle size is recommended.

Drying agents are not recommended for use with On-the-Go impregnation equipment.

#### Precautions to follow to avoid the potential for explosion:

- **DO NOT** impregnate Parallel Plus on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers.
- **DO NOT** combine Parallel Plus with a single superphosphate (0-20-0) or treble superphosphate (0-46-0).
- **DO NOT** use Parallel Plus on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

#### APPLICATION

Apply 200-700 lbs. of the herbicide/fertilizer mixture per acre. For best results, apply the mixture uniformly to the soil with properly calibrated equipment immediately after blending. Uniform application of the herbicide/fertilizer mixture is essential in order to prevent possible crop injury or injury to subsequent rotational crops. 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.

To help avoid rotational crop injury, make applications as early as possible, since Parallel Plus impregnated onto dry bulk granular fertilizers can be expected to last longer in the soil than when Parallel Plus is applied as a spray in water or fluid fertilizer.

To avoid potential crop injury, **DO NOT** use the herbicide/fertilizer mixture on crops where planting beds are to be formed.

#### APPLICATION IN WATER OR FLUID FERTILIZERS

**Parallel Plus Alone:** Fill the spray tank ½ to ¾ full with water or fluid fertilizer, add the proper amount of Parallel Plus, then add the rest of the water or fluid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform suspension.

**Tank Mixtures:** Fill the spray tank ½ to ¾ full with water or fluid fertilizer, add the proper amount of Parallel Plus, then add Atrazine, Banvel, linuron, Princep or Balance; next add Parallel; then add Gramoxone Extra, Landmaster BW, Touchdown or Roundup, depending on the tank-mix combination desired; and finally, add the rest of the water or fluid fertilizer. Only water may be used with Parallel Plus + Liberty Herbicide when applied postemergence to corn designated as tolerant to Liberty (glufosinate); and with Roundup Ultra or Touchdown when applied

postemergence to corn designated as tolerant to Roundup (glyphosate) Provide sufficient agitation during mixing and application to maintain a uniform suspension.

**Compatibility Test:** Check the compatibility of Parallel Plus and tank mixtures in fluid fertilizer by mixing proportionate quantities in a small container, as described below, before mixing in the spray tank. Nitrogen solutions of complete fluid fertilizers may replace all or part of the water in the spray. Since liquid fertilizers can vary, even within the same analysis, **always check compatibility each time before reuse**. Be especially careful when using complete suspension or fluid fertilizers, as serious compatibility problems are more apt to occur. Commercial application equipment may improve compatibility in some instances. The following test assumes a spray volume of 25 gal/A. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure:

- 1. Add 1 pt. of fertilizer to each of 2 one-qt. jars with tight lids.
- 2. To **one** of the jars, add <sup>1</sup>/<sub>4</sub> tsp. or 1.2 milliliters of a compatibility agent approved for this use, such as Compex® or Unite® (1/4 tsp. is equivalent to 2 pts/100 gals spray). Shake or stir gently to mix.
- 3. To **both** jars, add the appropriate amount of herbicides(s). If more than one herbicide is used, add them separately with dry herbicides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently, to thoroughly mix. The appropriate amount of herbicides for this test follows:

**Dry herbicides:** For each pound to be applied per acre, add 1.4 teaspoons to each jar. **Liquid herbicides:** For each pint to be applied per acre, add 0.5 teaspoon or 2.5 milliliters to each jar.

- 4. After adding all ingredients, put lids on and tighten, and invert each jar 10 times to mix. Let the mixtures stand 15 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 herbicides(s) in water before addition, or (B) add ½ of the compatibility agent to the fertilizer and the other ½ to the emulsifiable concentrate of flowable herbicide before addition to the mixture. If still incompatible, 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.

#### 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-textures or high in organic matter.

#### Recommendations are based upon soil textures, which are defined as follows:

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

When tank mixing or sequentially applying atrazine or products containing atrazine to corn or sorghum, **DO NOT** exceed an application rate of 2.0 lbs. atrazine active ingredient per acre for any single application, and the total lbs. of atrazine active ingredient per acre must not exceed 2.5 lbs. active ingredient per acre per year.

#### **APPLICATION PROCEDURES**

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

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

<u>Band width in inches</u> X Broadcast rate per acre = Amount needed per acre of field Row width in inches

Low Carrier Application (Broadcast Ground Application Only): Use sprayers, such as Ag-Chem RoGator®, Hagie, John Deere Hi-Cycle<sup>™</sup>, John Deere 4700 Sprayer, Melroe Spra-Coupe, Tyler Patriot<sup>™</sup>, or Willmar Air Ride®, that provide accurate and uniform application. Only water may be used as a carrier. Screens in suction and in-line strainers should be 50-mesh. Manufacturers may require that tip screens as fine as 100-mesh be used with some nozzles. Use a pump with capacity to maintain up to 35-40 psi at the nozzles, and provide sufficient

agitation in tank to keep mixture in suspension. Use a minimum of 5.0 gals. of spray mixture per acre. Maximum recommended sprayer speed is 15 mph. Maintain uniform travel speed while spraying. Rinse sprayer thoroughly with clean water immediately after each use.

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

**Aerial Application (for Parallel Plus alone):** Use aerial application only where broadcast applications are specified. Apply a minimum of 1.0 gal. of water for each 1.0 gal. of this product applied per acre, but for rates below 1.0 gal/A, use in sufficient water to equal 2.0 gals/A of total spray. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. In order to assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft, using low-drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive non-target plants, apply Parallel Plus by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

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

#### MANDATORY SPRAY DRIFT MANAGEMENT

#### Aerial Applications:

- **DO NOT** release spray at a heigh greater than 10 ft 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).
- User must maintain a 150 foot (460 m) 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.
- If the windspeed is 10 miles per hour or less, applicators must use ½ swath displacement upwind at the downwind edge of the field. When the windspeed is 11 15 miles per hour, applicators must use ¾ swath displacement upwind at the downwind edge of the field.
- **DO NOT** apply when wind speeds exceed 15 mph at the application sites. If the windspeed is greater than 10 mph, the boom length must be 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.
- **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 miles per hour at the application site.
- User must maintain a 15 foot (4.6 m) 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:**

- 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.
- Applicators are required to select the nozzle and pressure that deliver medium or coarser droplet size (ASABE S572.3) for all applications.
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

#### SPRAY DRIFT ADVISORIES

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

#### IMPORTANCE OF DROPLET SIZE

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

#### CONTROLLING DROPLET SIZE – Ground Boom

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

#### CONTROLLING DROPLET SIZE – Aircraft

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

#### **BOOM HEIGHT – Ground Boom**

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 the 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 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.

#### WEED RESISTANCE MANAGEMENT

For resistance management, please note that Parallel Plus contains both a Group 5/atrazine and Group 15/metolachlor herbicide. Any weed population may contain plants naturally resistant to Group 5 and/or Group 15 herbicides. The resistant individuals may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

#### Weed Management

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

- Rotate the use of this product or other Group 5 or Group 15 herbicides within a growing season sequence of among growing seasons with different herbicide groups that control the same weeds in the 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 consider 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 before and after herbicide application to monitor weed populations for early signs or 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 resistancemanagement and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact ADAMA at 1-866-406-6262.

#### PARALLEL PLUS APPLIED ALONE-CORN (Field, Sweet, Pop), GRAIN SORGHUM, OR FORAGE SORGHUM

WEEDS CONTROLLED				
Barnyardgrass (watergrass)	Fall panicum	Jimsonweed	Smartweed	
Browntop panicum	Florida pusley	Lambsquarters	Southwestern cupgrass	
Carpetweed	Foxtail millet	Morningglory	Velvetleaf*	
Chickweed	Galinsoga	Mustards	Waterhemp	
Cocklebur*	Giant foxtail	Nightshades	Witchgrass	
Common purslane	Giant ragweed*	Pigweed	Yellow foxtail	
Common ragweed	Goosegrass	Prairie cupgrass	Yellow nutsedge*	
Crabgrass Green foxtail Red rice				
Crowfootgrass	Crowfootgrass Henbit Signalgrass(Brachiaria)*			
WEEDS PARTIALLY CONTROLLED**				
Sandbur	Shattercane	Volunteer sorghum	Woolly cupgrass	
Seedling johnsongrass	Sicklepod			

#### Early Preplant, Preplant Surface-Applied, Preplant Incorporated, or Preemergence

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

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

- In corn, 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.
- Thoroughly till moist soil to destroy germinating and emerged weeds. If Parallel Plus is to be applied preplant incorporated, this tillage may be used to incorporate Parallel Plus if uniform 2-inch incorporation is achieved as recommended elsewhere on this label.

- Plant crop into moist soil immediately after tillage. If Parallel Plus is to be used preemergence, apply at planting or immediately after planting.
- If available, sprinkler irrigate within 2 days after application. Apply ½ 1 inch of water. Use lower water volume (1/2 inch) on coarse-textured soils and higher volume (1 inch) on fine-textured soils.
- 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.

#### Parallel Plus Rate Limitations and Precautions-Corn and Sorghum

Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or greater setbacks), which are different from the label, the more restrictive/protective requirements must be followed. Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

When tank mixing or sequentially applying atrazine or products containing atrazine to corn or sorghum, **DO NOT** exceed an application rate of 2.0 lbs. atrazine active ingredient per acre for any single application, and the total lbs. of atrazine active ingredient per acre must not exceed 2.5 lbs. active ingredient per acre per year.

When tank-mixing or sequentially applying atrazine or other products containing atrazine, the total pounds of atrazine applied (lbs ai/A) must not exceed the specified seasonal rate limits from preemergence, or postemergence, or preemergence + postemergence applications.

For purposes of calculating total atrazine active ingredient applied, Parallel Plus contains 2.8 lbs. a.i. atrazine + related compounds per gal. (0.7 lb. a.i./qt.).

DO NOT apply atrazine and propazine products to the same sorghum acre.

#### FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE

#### • On Highly Erodible Soils (as defined by NRCS)

--If conservation tillage is practiced (leaving at least 30% of the soil covered with plant residues at planting), apply a maximum of 2.85 qts./A as a broadcast spray.

- --If the soil coverage with plant residue is less than 30% at planting, a maximum of 2.29 qts./A may be applied.
- On Soils Not Highly Erodible

Apply 2.85 qts./A as a broadcast spray.

#### FOR POSTEMERGENCE APPLICATION

--If no atrazine was applied prior to corn emergence, apply a maximum of 2.85 pts./A broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 lbs. active ingredient (3.57 qts. of this product) per acre per calendar year.

#### FOR POSTEMERGENCE APPLICATION TO CORN

If no atrazine was applied prior to corn emergence, a maximum of **2 lbs a.i.** /A (2.85 qts./A) may be applied postemergence. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 lbs. active ingredient (3.57 qts. of Parallel Plus) per acre per calendar year.

**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** graze or feed forage from preemergent treated sorghum for 60 days. **DO NOT** graze or feed forage from post-emergent treated sorghum for 45 days.

Post-emergent applications must be made before the crop reaches 12 inches in height.

#### **APPLICATION PROCEDURES**

**Early Preplant (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 2/3 the recommended rate of Parallel Plus as a split treatment 30-45 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 1.9 qts./A not more than 2 weeks prior to planting. The above procedure may be followed if Atrazine or Parallel or Princep is used in tank mixtures with Parallel Plus. Substitute a fluid fertilizer for some or all of the water carrier for burndown of existing annual weeds listed on this label up to the 2-leaf stage of development. The addition of crop oil concentrate to the spray mixture will enhance the burndown activity. If larger weeds are

present at the time of treatment, apply in a tank-mixture combination with a contact herbicide (for example, Gramoxone Extra or Roundup). Observe directions for use, precautions, and restrictions on the label of the contact herbicide. When tank mixing atrazine containing products, **DO NOT** exceed 2.0 lbs. ai./A of atrazine as a pre or post application or 2.5 lbs. a.i./A as the total of pre plus post applications per calendar year.

On medium- and fine-textured soils with minimum- or no-tillage systems in DE, MD, MI, NY, OH, PA, VA, and WV, early preplant 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 postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide may be used, i.e., Atrazine, Beacon®, Banvel, Basagran®, bromoxynil (Brominal® or Buctril®), Exceed®, Marksman®, or 2,4-D. If the postemergence treatment includes the herbicide used early preplant, **DO NOT** exceed the labeled rate for corn on a given soil texture. Observe all directions for use, precautions, and limitations on the label of the postemergent herbicide.

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

Parallel Plus may be applied in the fall, as a single application, for control of 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.

On medium- and fine-textured soils following final seed bed preparation in the Blacklands and Gulf Coast areas of TX, an early preplant application of Parallel Plus at 2.1- 2.37 qts./A may be made 30-45 days before planting. Grass suppression of 2-3 weeks after planting can be expected as a result of this application. **DO NOT** incorporate or disturb the soil before planting, and avoid moving the soil during the planting operation. A follow-up application of Parallel may be needed in fields with a history of heavy grass pressure. Apply after planting, but before corn and grass weeds emerge.

**Note:** (1) If a follow-up application of Parallel is needed, **DO NOT** exceed a total of 1.6 lbs. a.i. of metolachlor per acre, including the preplant Parallel Plus application on medium- or fine-textured soils. On fine-textured soils with more than 3% organic matter, **DO NOT** exceed 1.91 lbs. a.i. of metolachlor. (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.

Soil Texture	Single Application	Split application*	
		30-45 DBP**	At Planting
Coarse (Sand, Loamy sand, Sandy loam)	1.9 qts./A	DO NOT	T APPLY
Medium (Loam, Silt Ioam, Silt)	2.29 qts./A	1.53 qts./A	0.76 qts./A
Fine (Sandy clay loam, Silty clay loam, Clay loam, Silty clay, Sandy clay, Clay)	2.29 qts./A <sup>A</sup>	1.53 qts./A	0.76 qts./A
	2.29-2.83 qts./A <sup>B</sup>	1.90 qts./A	0.93 qt/A

#### Table 1: Parallel Plus-Early Preplant-Corn

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

\*\*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 postemergence herbicide may be needed.

<sup>B.</sup> Use these rates for all other applications.

**Early Preplant (Sorghum-Seed Treated with Concep or Screen):** For minimum-tillage and no-tillage systems only, Parallel Plus 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 30-45 days before planting with 2/3

the recommended rate applied initially and the remaining <sup>1</sup>/<sub>3</sub> 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 this label up to the 2-leaf stage of development. The addition of crop oil concentrate to the spray mixture will enhance the burndown activity. If larger weeds are present at the time of treatment, apply in a tank-mixture combination with a contact herbicide (for example, Gramoxone Extra, Landmaster BW, or Roundup). Observe directions for use, precautions, and restrictions on the label of the contact herbicide. Under dry conditions, irrigation after application is recommended to move Parallel Plus into the soil.

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 preplant application of Parallel Plus at 2.1 - 2.37 qts./A may be made 30-45 days before planting. Grass suppression of 2-3 weeks after planting can be expected as a result of this application.

**DO NOT** incorporate or disturb the soil before planting, and avoid moving the soil during the planting operation. A follow-up application of Parallel may be needed in fields with a history of heavy grass pressure. Apply after planting, but before sorghum and grass weeds emerge.

**DO NOT** use on soils with a pH greater than 8.0 if grain sorghum is to be planted.

If a follow-up application of Parallel is needed, **DO NOT** exceed a total of 1.47 lbs. a.i. of metolachlor per acre, including the early preplant Parallel Plus application on medium-textured soils. On fine-textured soils, **DO NOT** exceed 1.6 lbs. a.i. of metolachlor per acre.

Soil Texture	Organic Matter	Single Application	Split Application*	
	Content	Γ	30-45 DBP **	At Planting
Coarse (Sand, Loamy sand, Sandy loam)	Any Level	DO NOT USE	DO NC	TUSE
Medium (Loam, Silt	Less than 1.0%	DO NOT USE	DO NO	OT USE
Loam, Silt)	More than 1.0%	2.18 qts./A	1.46 qts./A	0.72 qts./A
Fine (Sandy Clay loam, Silty Clay	Less than 1.5% <sup>B</sup>	2.18 qts./A	1.46 qts./A	0.72 qts./A
loam, Clay loam, Sandy clay, Silty clay, Clay)	More than 1.5% <sup>B</sup>	2.18-2.37 qts./A	1.59 qts./A	0.78 qts./A

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

\*\* 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 postemergence herbicide may be needed.
- <sup>B.</sup> Use these rates for all other applications.

**Preplant Surface, Preplant Incorporated, or Preemergence (Corn or Sorghum-Seed Treated with Concep or Screen):** Apply Parallel Plus preplant surface, preplant incorporated, or preemergence, using the appropriate rates from Table 3 for corn, or from Table 4 for sorghum.

**Preplant 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 for corn.

**Preplant 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 preplant 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.

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

Table 3: Parallel Plus-Preplant Surface, Preplant Incorporated, or Preemergence-Corn

Soil Texture	Broadcast Rate Per Acre		
	Less Than 3% Organic Matter	3% Organic Matter or Greater	
Coarse (Sand, Loamy sand, Sandy loam)	1.4-1.90 qts.	1.48-1.90 qts.	
Medium (Loam, Silt loam, Silt)	1.89-2.29 qts.	1.89-2.29 qts.	
Fine (Sandy clay loam, Silty clay loam, Clay loam, Sandy clay, Silty clay, Clay)	1.89-2.29 qts.	1.90-2.29 qts. <sup>A</sup>	
		2.29-2.83 qts. <sup>B</sup>	
Muck or peat soils (more than 20% organic matter)	DO	NOT USE	

- For cocklebur, yellow nutsedge, and velvetleaf control on fine-textured soils above 3% organic matter: Apply 2.83 qts. of Parallel Plus per acre.
- 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 postemergence herbicide may be needed.
- <sup>B.</sup> Use these rates for all other applications.

In the event of escape of annual weeds following an early preplant, preplant surface, preplant incorporated, or preemergence treatment of Parallel Plus applied alone or in combination, follow with a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide, i.e., Atrazine, Beacon, Accent®, Banvel, Basagran, Brominal, Buctril, Exceed, Marksman, or 2,4-D. If the postemergence treatment includes the herbicide used in the earlier treatment, **DO NOT** exceed the labeled rate on a given soil texture.

Brominal or Buctril may be applied postemergence alone or in a tank-mix combination with Atrazine. **DO NOT** exceed 1.2 lbs. a.i./A of Atrazine in tank-mix combination with Brominal or Buctril postemergence. Refer to the Atrazine, Brominal, and Buctril labels for specific rates and precautions.

If Atrazine or another product containing atrazine is used postemergence following application of Parallel Plus, **DO NOT** exceed a total of 2.5 lbs a.i./A of atrazine per year.

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 Parallel Plus Combinations section of this label.

Table 4: Parallel Plus Preplant Surface, Preplant Incorporated, or Preemergence-Grain or Forage Sorghum*	r.
(Seed treated with Concep or Screen)	

Soil Texture	Organic Matter	Broadcast Rate Per Acre
Coarse (Sand, Loamy sand, Sandy loam)	Any level	DO NOT USE
Medium and Fine (Loam, Silt Ioam, Silt, Sandy clay Ioam, Silty	Less than 1.0%	DO NOT USE
clay loam, Clay loam, Sandy clay, Silty clay, Clay)	More than 1.0%	1.90-2.49 qts.

\* **DO NOT** use in NM or TX, except the TX panhandle, Gulf Coast, and Blacklands areas. **DO NOT** apply preplant incorporated in AZ or the Imperial Valley of CA.

Substitute a fluid fertilizer for some or all of the water carrier for burndown of existing annual weeds listed on this label up to the 2-leaf stage of development. The addition of crop oil concentrate to the spray mixture will enhance the burndown activity. If larger weeds are present at the time of treatment, add a contact herbicide as noted in the PARALLEL PLUS COMBINATION section of this label.

#### **Precautions:**

- **DO NOT** apply Parallel Plus on highly alkaline soils (pH greater than 8.0) or on eroded areas where calcareous subsoils are exposed.
- **DO NOT** apply Parallel Plus 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 dry mulch tillage.
- **DO NOT** apply atrazine and propazine products to the same sorghum acre.

- Injury may occur if both Parallel Plus applied early preplant, preplant surface, preplant incorporated, or preemergence and an at-planting systemic insecticide applied in furrow are used.
- In addition, sorghum growing under stress caused by minor element deficiency may be injured by Parallel Plus.

#### **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 banded treatment may be applied.
- Corn, sorghum, soybeans, cotton, or peanuts may be planted in the spring following treatment. **DO NOT** graze or feed forage or fodder from cotton to livestock, or illegal residues may result.
- Injury may occur to soybeans planted the year following application on soil 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
  application if the rate applied to corn or sorghum was more than 2.0 lbs. a.i. of atrazine or equivalent band
  application rate, or soybean injury may occur.
- If applied after June 10, **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 application, or injury may occur.

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

#### Postemergence Broadcast-Corn

**Application:** Apply early postemergence, using the appropriate rate from Table 5. Apply this treatment before grass and broadleaf weeds pass the 2-leaf stage and before corn exceeds 5 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 effect later growth or yield. **DO NOT** apply postemergence in fluid fertilizer, or severe crop injury may occur.

#### Table 5: Postemergence Broadcast-Corn

Soil Texture	Broadcast Rate Per Acre
Coarse (Sand, Loamy sand, Sandy loam)	1.90 qts.
Medium (Loam, Silt loam, Silt)	2.29 qts.
Fine (Sandy clay loam, Silty clay loam, Clay loam, Sandy	2.37-2.83 qts.*
clay, Silty clay, Clay)	

\*For better residual control of cocklebur, velvetleaf, and yellow nutsedge on fine-textured soils above 3% organic matter, apply 2.83 qts. of Parallel Plus per acre.

If Parallel Plus has been applied early preplant, preplant surface, preplant incorporated, or preemergence, **DO NOT** exceed a total of **2.85 qts.**/A of Parallel Plus on corn crop.

If Atrazine or Atrazine plus Parallel tank mixtures have been applied preplant surface, preplant incorporated, or preemergence, limit the Parallel Plus early post application not to exceed a total of 2.5 lbs. of the active ingredient in Atrazine or 4 lbs. of the active ingredient in Parallel per acre on a corn crop, or illegal residues may result.

#### **Rotational Crops:**

Follow the preceding crop rotation instructions for **Parallel Plus-Early Preplant**, **Preplant Surface-Applied**, **Preplant Incorporated**, or **Preemergence** 

#### Postemergence-Directed-Corn

Parallel Plus may be applied at 1.19-2.37 qts./A in a minimum of 15 gals. of water as a postemergence directed treatment to corn to extend control of weeds listed in the Early Preplant, Preplant Surface-Applied, Preplant Incorporated, Preemergence, or Postemergence Broadcast section of the corn label. Apply using the appropriate rate from Table 6.

For best results, apply Parallel Plus to weed-free soil following use of a preplant surface, preplant incorporated, or preemergence herbicide, or following a lay-by cultivation. If weeds have emerged at the time of Parallel Plus application, apply before grass and broadleaf weeds exceed the 2-leaf stage. Application to weeds larger than the two-leaf stage will generally give unsatisfactory control. Apply to corn not exceeding 12 inches in height. Minimize contact with corn leaves. **DO NOT** apply postemergence in fluid fertilizer, or severe crop injury may occur.

#### Table 6: Postemergence-Directed-Corn

Soil Texture	Broadcast Rate Per Acre
Coarse (Sand, Loamy sand, Sandy loam)	1.78-1.90 qts.
Medium (Loam, Silt loam, Silt)	1.90-2.37 qts.
Fine (Sandy clay loam, Silty clay loam, Clay loam,	1.90-2.83 qts.*
Sandy clay, Silty clay, Clay)	

\* For better residual control of cocklebur, velvetleaf, and yellow nutsedge on fine-textured soils above 3% organic matter, apply 2.83 qts. of Parallel Plus per acre.

If Parallel Plus has been applied early preplant, preplant surface, preplant incorporated, or preemergence, **DO NOT** exceed a total of 3.0 qts./A of Parallel Plus on corn crop.

If Atrazine plus Parallel tank mixtures have been applied preplant surface, preplant incorporated, or preemergence, limit the Parallel Plus post-directed application not to exceed a total of 2.5 lbs. of the active ingredient in Atrazine or 4 lbs. of the active ingredient in Parallel per acre on a corn crop, or illegal residues may result.

#### **PARALLEL PLUS COMBINATION-CORN\***

Always follow tank mix instruction for tank-mix products when mixing with Parallel Plus.

\*When tank-mixing Parallel Plus with Atrazine formulations, refer to the Parallel Plus Rate Limitations section of this label. **DO NOT** exceed the following:

On highly erodible land with less than 30% plant residue	1.6 lbs. a.i. of atrazine
cover prior to crop emergence:	
On other land prior to crop emergence:	2.0 lbs. a.i. of atrazine
Postemergence applications only-any land:	2.0 lbs. a.i. of atrazine
Preemergence + postemergence applications:	2.5 lbs. a.i. of atrazine

#### Tank Mixture with Atrazine, Parallel, Princep or Balance-Conventional Tillage

Check the compatibility of Parallel Plus tank mixtures with Balance before mixing in spray tank by using the procedure described under Application in Water or Fluid Fertilizers.

**Atrazine 4L or 90DF:** Add up to 1 qt. of Atrazine 4L (1.1 lbs. Atrazine 90DF) per acre to the rate of Parallel Plus recommended 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.

**Parallel:** Add up to 0.5 pt. of Parallel per acre to the rate of Parallel Plus recommended in Table 3 when heavy infestation of yellow nutsedge, sandbur, or seedling johnsongrass are expected.

**Princep (4L or 90DF):** Add up to 1 qt. of Princep 4L (1.1 lbs. of Caliber 90) per acre to the rate of Parallel Plus recommended in Table 3 where heavy infestations of crabgrass or fall panicum are expected or additional control of certain broadleafs is desired.

**Balance (Isoxaflutole) (Field Corn Only):** The tank mixture of Parallel Plus + Balance provides control of weeds listed on the Parallel Plus label, certain weed biotypes resistant to ALS-inhibitor herbicides and to triazine herbicides, velvetleaf, and others on the respective product labels. Balance will contribute to the control of problem grass and other broadleaf species on its label. Application may be preplant (surface-applied up to 14 days before

planting), preplant incorporated or preemergence in conventional tillage, conservation tillage and no-till systems. Refer to Table 1: Parallel Plus – Early Preplant for the early preplant application rate (8-14 days before planting) or refer to Table 3 for the appropriate rate for preplant (surface-applied 0-7 days before planting), preplant incorporated, or preemergence application. Refer to the Application Procedures and Tank Mix Directions on the Balance label, but to reduce the potential for injury from isoxaflutole contact with corn, use 1.0 oz/A of Balance on coarse textured soils and 1.0-1.5 oz/A on medium and fine textured soils in conventional, conservation and no-tillage systems. For early preplant applications 8-14 days before planting, add 0.5 oz/A of Balance to the rates of Balance described above.

Observe all applicable directions, precautions, and limitations on the Parallel Plus and Balance labels when applying these products in tank mix combinations in states where Balance is registered. Where difficult species and/or severe weed populations are expected, use the maximum rates of Parallel Plus and Balance where rate ranges are listed for the tank mixture.

# Tank Mixture of Parallel Plus Alone or Parallel Plus + Atrazine, Parallel, Princep or Balance with Gramoxone Extra, Landmaster BW, Touchdown or 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, the contact herbicides Gramoxone Extra, Landmaster BW, Touchdown or Roundup should be tank-mixed with Parallel Plus alone or with Parallel Plus + Atrazine, Parallel, Princep or Balance. When used as directed, the Gramoxone Extra portion of the tank mixture controls most emerged annual weeds and suppresses many perennial weeds. Landmaster BW, Touchdown or Roundup combinations will control emerged annual and perennial weeds when applied as directed on its label. The Parallel Plus portion of the tank mixture provides preemergence control of the weeds listed on this label in the Parallel Plus Alone section for corn. The addition of Atrazine, Parallel, Princep or Balance offers the advantage indicated for each under Conventional Tillage.

**Application:** Apply before, during or after planting, but before corn emerges, at the appropriate rate in Table 7. Up to 1.0 qt of Atrazine 4L (1.1 lbs of Atrazine 90DF), or 1.0-2.0 oz of Balance (refer to Tank Mixture with Balance for specific rate), or 0.33 pt of Parallel or 1.0 qt of Princep 4L (1.1 lbs of Caliber 90) per acre may be added to the rate of Parallel Plus recommended in Table 7. Add Gramoxone Extra, Landmaster BW, Touchdown or Roundup at labeled rates. **Tank mixtures with Balance can be used only on field corn.** 

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

## Tank mixture of Parallel Plus Alone or Parallel Plus + Atrazine, or Balance, with 2,4-D or 2,4-D + Banvel 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, Parallel Plus may be applied in combination with Atrazine or Balance.

When used as directed, the Parallel Plus portion on the tank mixture provides preemergence control of the weeds listed on this label in the Parallel Plus Alone section for corn. The addition of Atrazine or Balance offers the advantage indicated for each under Conventional Tillage.

**Application:** Apply Parallel Plus before, during, or after planting, but before corn emerges, at the appropriate rate in Table 7, Up to 1 qt. of Atrazine 4L (1.1 lbs. of Atrazine 90DF) or 1.0-2.0 oz of Balance (Refer TO Tank Mixture with Balance for specific rate) per acre may be added to the rate of Parallel Plus recommended 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 gals. of carrier per acre.

As carriers, nitrogen solutions and complete liquid fertilizers, applied before corn emergence, enhance burndown of existing weeds, and therefore are recommended instead of water. Add X-77® surfactant at 1.0-2.0 qts./100 gals. of diluted spray or another surfactant cleared for use on growing crops at its recommended rate. Apply before weeds exceed 3 inches in height. If alfalfa is present, add Banvel to the spray mixture at 0.33-0.5 pt/A and apply before the 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 Gramoxone Max at the rate of 2.5 pts./A in place of, or in addition to 2,4-D as indicated above. **DO NOT** apply Gramoxone Max in suspension-type liquid fertilizer. Observe all directions for use, precautions, and limitations in the respective product labels when applying these products in tank-mix combination.

#### Table 7: Parallel Plus for Minimum-Tillage or No-Tillage Corn

Soil Texture	Broadcast Rate Per Acre
Coarse (Sand, Loamy sand, Sandy loam)	1.90 qts.
Medium (Loam, Silt Ioam, Silt)	2.29 qts.
Fine (Sandy clay loam, Silty clay loam, Clay loam, Sandy clay,	2.29 qts. <sup>A</sup>
Silty clay, Clay)	2.37-2.83 qts.* <sup>B</sup>
Muck or peat soils	DO NOT USE

\*For cocklebur, velvetleaf, and yellow nutsedge control on fine-textured soils above 3% organic matter, apply 2.83 qts. of Parallel Plus per acre.

- 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 postemergence herbicide may be needed.
- <sup>B.</sup> Use these rates for all other applications.

#### 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, Parallel Plus may be applied preemergence in combination with linuron. Apply Parallel Plus according to the rates in Table 3 and linuron according to the following rates:

Soil Texture	Broadcast Rate Per Acre
Sandy loam (1-3% organic matter)	0.67 lb. Lorox*
Sandy loam (3-6% organic matter)	1.0 lb. Lorox*
Medium- and fine-textured soils (1-6% organic matter)	1.0 lb. Lorox*

\*When using Lorox L or Lorox DF, use equivalent rates. One pt. of Lorox L equals 1 lb. of Lorox DF. Follow instructions and precautions on the Parallel Plus and Lorox labels when tank-mixing these products.

#### **Rotational Crops:**

Follow the crop rotation instructions in the Parallel Plus Alone section for corn.

#### Tank Mixture with Callisto<sup>®</sup> (Mesotrione)

For preemergence control of weeds in corn, Parallel Plus may be applied in combination with Callisto. Apply Parallel Plus according to the rates in Table 3 and Callisto at a rate of 5.0-6.0 fl oz/A. Observe all directions for use, precautions, and limitations on the respective product labels when applying these products in a tank mixture.

#### PARALLEL PLUS COMBINATIONS-FIELD CORN ONLY

#### Tank Mixture with Broadstrike + Dual for Preemergence Weed Control in Field Corn Only

Reduced rates of Broadstrike + Dual herbicide and Parallel Plus herbicide may be tank mixed for control of several annual grasses and broadleaf weeds in field corn. In addition to the weeds listed as controlled on the Parallel Plus label, this mixture will control velvetleaf and triazine resistant populations of lambsquarters, pigweed and velvetleaf. Weeds partially controlled by this tank-mix include those under the WEEDS PARTIALLY CONTROLLED section of the Parallel Plus label plus common ragweed and morningglory. Control of a few weeds can be erratic. Refer to the WEEDS CONTROLLED section of this label for further information.

The Broadstrike + Dual and Parallel Plus tank mix may be applied preplant incorporated, preemergence, or applied postemergence through the "spike" stage of corn growth, but before weed emergence. When applied postemergence to the crop, apply only with water before corn is 2 inches tall and first true leaf is unfurled. Target weeds that have emerged at the time of application may not be controlled.

#### Mixing Instructions:

Fill the spray tank ¼ to ½ full with water or liquid fertilizer and start agitation. Add the required amount of Parallel Plus and allow to become fully dispersed, then add the required amount of Broadstrike + Dual then add the rest of the water or liquid fertilizer. For tank mixtures with liquid fertilizers, always check compatibility as described on the labels for Parallel Plus and Broadstrike + Dual.

#### **Precautions and Restrictions:**

- DO NOT apply more than two weeks before planting.
- **DO NOT** apply to field corn grown for seed.
- **DO NOT** use when Counter<sup>®</sup> or Thimet<sup>®</sup> insecticides are to be applied due to the risk of severe crop injury.
- Plant corn at least 1<sup>1</sup>/<sub>2</sub> inches deep.
- Refer to the product labels for Broadstrike + Dual and Parallel Plus for specific use restrictions, use precautions, and rotational crop intervals. The most restrictive provisions on either label shall apply.

	Less Than 3%	Orga	nic Matter <sup>1</sup>	Greater Than 3	3% Org	anic Matter
Soil Texture	Broadstrike + Dual (pts)	+	Parallel Plus (pts)	Broadstrike + Dual (pts)	+	Parallel Plus (pts)
Coarse	1.5	-	1.78	1.5	+	1.89
Medium	1.5-1.75 <sup>2</sup>	+	2.13	1.75	+	2.6
Fine	1.75	+	2.49	2.0	+	2.37-2.83 <sup>2</sup>

#### Table 8: Broadcast Application Rate Per Acre For Preemergence Weed Control In Field Corn

<sup>1</sup>Application on soils with <1.5% organic matter may result in unacceptable crop injury <sup>2</sup>Use the higher rate in fields with heavy weed pressure

Follow directions in the PARALLEL PLUS APPLIED ALONE section of this label for improved control of certain weeds.

Add 1-2 pts/A of Atrazine 4L or equivalent rate of Atrazine 90DF for an improved spectrum of broadleaf control and for more effective burndown in no-till or minimum till situations. Follow atrazine rate restrictions on the Atrazine label.

Triazine "resistant" weeds (triazine tolerant biotypes) are controlled by the tank mixture of Broadstrike + Dual and Parallel Plus.

TANK MIXTURE FOR POSTEMERGENCE SALVAGE WEED CONTROL IN FIELD CORN ONLY

**Parallel Plus + Liberty Herbicide: Postemergence Use in LibertyLink<sup>®</sup> Corn or Corn Warranted by Bayer CropScience as being tolerant to Liberty Herbicide:** The tank mixture of Parallel Plus + Liberty Herbicide can be applied postemergence to weeds and corn from seed designated as LibertyLink or corn warranted by Bayer CropSciences as being tolerant to Liberty Herbicide. Liberty provides postemergence control of a broad spectrum of grass and broadleaf weeds and the Parallel Plus provides residual control of grasses and broadleaf weeds listed in the label section Parallel Plus Applied Alone – Weeds Controlled. For the proper rate of Parallel Plus applied postemergence, refer to Table 5 and use the minimum rate per soil texture for season-long residual control. Refer to the Liberty label for the Liberty postemergence application rate according to weed species and their maximum height at the time of postemergence application. Where multiple weed species are present, use the highest Liberty rate recommended to control the species and growth stages present. Follow all applicable use directions, limitations, precautions and information regarding application to corn on the Parallel Plus and Liberty Herbicide labels.

**Parallel Plus + Touchdown or Roundup Ultra (glyphosate) for Postemergence Application to Corn with the Roundup Ready**<sup>®</sup> **Gene**-The tank mixture of Parallel Plus + Touchdown or Roundup Ultra can be applied postemergence to weeds and to corn designated as containing the Roundup Ready Gene. Application may be applied postemergence to Roundup Ready corn up to 12 inches in height. This mixture will provide postemergence control of weed species on the Roundup Ultra label and also residual control of weed species on the Parallel Plus rate postemergence with Roundup Ultra in Roundup Ready corn as specified in Table 5 of this label according to soil texture. Refer to the Supplemental Labeling of Touchdown or Roundup Ultra for Postemergence Applications to Corn with the Roundup Ready Gene and to each product label and follow all appropriate use directions, application procedures, precautions, and limitations. Apply 24-32 fl. oz/A of Roundup Ultra for control of problem species. Follow all applicable use directions, limitations, precautions, and information regarding application to corn on the Parallel Plus and Roundup Ultra labels, and on the Supplemental labeling of Roundup Ultra for Postemergence Application to Corn with the Roundup Ready Gene. Where difficult species and/or severe weed populations are expected, use the maximum rate where rate ranges are listed.

**Parallel Plus + Exceed:** Apply 1.78-2.37 qts./A of Parallel Plus + 1.0 oz/A of Exceed to corn that is 4 to 12 inches tall. The application may be broadcast, semi-direct, or direct. The Parallel Plus rate is based on the soil texture, with 1.78 qts./A on coarse, and 1.99-2.37 qts./A on medium and fine soils. Add a nonionic 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 Accent.

**Parallel Plus + Exceed + Accent:** Apply the same rates of Parallel Plus and Exceed as mentioned above. Add Accent at 0.33 oz./A for more effective control of certain annual grasses. Apply to field corn between 4 and 12 inches. Add a nonionic surfactant at 0.25% v/v.

**Parallel Plus + Spirit:** Spirit herbicide at 1.0 oz./A can be substituted in place of Exceed in the above combinations in field corn only.

**DO NOT** use fertilizer or crop oil concentrate with these mixtures or injury to field corn may occur. The combination of Parallel Plus with other products for postemergence weed control in corn is generally not recommended. **These combinations may cause injury and/or weed control concerns that would not exist when the products are used separately.** A certain inherent risk is involved when the various combinations of these products used postemergence in corn. It should be noted that early preplant, preplant incorporated, or preemergence control of these weeds would usually provide more timely weed control resulting in higher yields that postemergence treatments.

#### Mixing Order:

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

- 1. Products in water-soluble bags should be added first.
- 2. Parallel Plus
- 3. Additives

#### Precautions:

- Follow all label instructions, precautions, and rotational restrictions for individual products when making these applications to field corn. When Parallel Plus is applied after June 10, crop injury may occur the following year if you rotate to crops other than corn or sorghum.
- In-row weed control may be reduced because of lack of coverage when applied to corn over 4 inches tall.

#### PARALLEL PLUS COMBINATIONS-GRAIN AND SORGHUM (SEED TREATED WITH CONCEP OR SCREEN)

# Tank mixture with Parallel Plus with Gramoxone Extra, Landmaster BW, Touchdown or 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 Gramoxone Extra, Landmaster BW, Touchdown or Roundup may be tank mixed with Parallel Plus. When used as directed, the Gramoxone Extra portion of the tank mixture controls most emerged annual weeds and suppresses many perennial weeds. Landmaster BW, Touchdown or Roundup combinations will control emerged annual and perennial weeds when applied as directed on its label. The Parallel Plus portion of the tank mixture provides preemergence control of the weeds listed on this label in the PARALLEL PLUS APPLIED ALONE section.

Refer to the label of each product used in combination and observe the planting details, restrictions, and all other precautions and limitations.

**Application:** Apply before, during or after planting, but before grain sorghum emerges, at the appropriate rate in Table 9. Add Gramoxone Extra, Landmaster BW, Touchdown or Roundup at the labeled rates.

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

### Table 9: Parallel Plus for Minimum-Tillage or No-Tillage Grain Sorghum\*

Soil Texture	Organic Matter	Broadcast Rate Per Acre
Coarse (Sand, Loamy sand, Sandy loam)	Any level	DO NOT USE
Medium and Fine (Loam, Silt loam, Silt, Sandy clay	Less than 1.0%	DO NOT USE
loam, Silty clay loam, Clay loam, Sandy clay, Silty	1-1.5%	2.18 qts.
clay, Clay)	More than 1.5%	2.37 qts.

\* **DO NOT** use in NM or TX, except the TX panhandle, Gulf Coast, and Blacklands areas. **DO NOT** apply preplant incorporated in AZ or the Imperial Valley of CA.

#### **Precautions:**

- **DO NOT** apply Parallel Plus on highly alkaline soils (pH greater than 8.0) or on eroded areas where calcareous subsoils are exposed.
- **DO NOT** apply Parallel Plus 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 dry mulch tillage.
- **DO NOT** apply atrazine and propazine products to the same sorghum acre.
- Injury may occur if both Parallel Plus applied early preplant, preplant surface, preplant incorporated, or preemergence and an at-planting systemic insecticide applied in furrow are used.
- In addition, sorghum growing under stress caused by minor element deficiency may be injured by Parallel Plus.

• **DO NOT** apply atrazine and propazine products to the same sorghum acre.

#### **Rotational Crops:**

Follow the crop rotation instructions in the PARALLEL PLUS ALONE section.

#### STORAGE AND DISPOSAL

#### **DO NOT** contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a cool dry place. Store product in original container only.

**PESTICIDE DISPOSAL:** Open dumping is prohibited. Wastes resulting from the use of this product are toxic. Improper disposal of unused pesticide is a violation of Federal law. Pesticide that cannot be used according to label instructions must be disposed of according to Federal, State or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

#### **CONTAINER HANDLING:**

**Nonrefillable Container (five gallons or less):** 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 ¼ 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. Puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

**Nonrefillable Container (greater than five 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 ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Replace and tank or store rinsate for later use or disposal. Repeat this procedure two more times. Puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

**Refillable Container (greater than 55 gallons):** Refillable container. Refill this container with metolachlor and atrazine only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. For final disposal, offer for recycling or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

#### LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once.

# By using this product, user or buyer accepts the following **CONDITIONS**, **DISCLAIMER OF WARRANTIES** and **LIMITATIONS OF LIABILITY**.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of ADAMA All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, ADAMA makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of ADAMA is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, ADAMA disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in

contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at ADAMA's election, the replacement of product.

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