



**OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION**

WASHINGTON, D.C. 20460

February 21, 2024

Amanda Albers  
Senior Regulatory Affairs Manager  
Bayer CropScience LP  
800 N. Lindbergh Blvd.  
St. Louis, MO 63167

Subject: Label Amendment - Registration Review Mitigation for Flufenacet  
Product Name: AXIOM DF HERBICIDE  
EPA Registration Number: 264-766  
Application Date: September 22, 2017 & April 7, 2023  
Decision Number: 590388

Dear Amanda Albers:

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 Flufenacet Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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

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 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

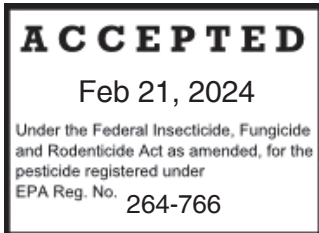
If you have any questions about this letter, please contact DeMariah Koger by phone at (202)-566-2288, or via email at [Koger.demariah@epa.gov](mailto:Koger.demariah@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Linda Arrington", with a stylized flourish at the end.

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

ENCLOSURE: Stamped label



FLUFENACET	GROUP	15	HERBICIDE
METRIBUZIN	GROUP	5	HERBICIDE

# Axiom<sup>®</sup> DF Herbicide

For weed control in winter wheat, fall seeded triticale, perennial grasses grown for seed, timothy grown for seed or hay, field corn, and soybeans

ACTIVE INGREDIENTS:

Flufenacet (CAS No. 142459-58-3)	
<i>N</i> -(4-Fluorophenyl)- <i>N</i> -(1-methylethyl)-2-[[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]-oxy]acetamide .....	54.4%
Metribuzin (CAS No. 21087-64-9)	
4-Amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4 <i>H</i> )-one .....	13.6%
OTHER INGREDIENTS: .....	32.0%
	100.0%

EPA Reg. No. 264-766	EPA Est. No.
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## KEEP OUT OF REACH OF CHILDREN CAUTION AVISO

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

Please refer to [back panel] [booklet] for additional precautionary statements and directions for use. [Note to reviewer: Location of additional precautionary statements and directions for use will vary between those listed, depending on container type/size.]

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577  
For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

### FIRST AID

If swallowed	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• <b>DO NOT</b> induce vomiting unless told to do so by a poison control center or doctor.</li><li>• <b>DO NOT</b> give anything by mouth to an unconscious person.</li></ul>
If in eyes	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
If on skin or clothing	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
If inhaled	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
In case of emergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577. Have an Axiom <sup>®</sup> DF Herbicide container or label with you when calling a poison control center or doctor, or going for treatment.	
Note To Physician: No specific antidote is available. Treat the patient symptomatically.	

# PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### CAUTION

Harmful if swallowed, inhaled, or absorbed through skin. Avoid breathing dust. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

### PERSONAL PROTECTIVE EQUIPMENT

All handlers must wear a minimum of:

- long sleeved shirt
- long pants
- shoes and socks
- chemical resistant gloves made of any waterproof material

Additional required PPE for specific activities/crops are included in the application instructions for each crop.

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.

### Wheat

In addition to the PPE for all handlers, mixers and loaders must wear coveralls.

Except when using closed mixing loading systems that meet the requirements listed in the WPS for agricultural pesticides [40 CFR 170.607(d)(2)(i) & (ii)] for dermal and inhalation protection, mixers and loaders must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R, or P filter.

### Grasses

In addition to the PPE for all handlers, mixers and loaders must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R, or P filter.

### Corn

In addition to the PPE for all handlers, mixers and loaders must use Engineering Controls that meet the requirements listed in the WPS for agricultural pesticides [40 CFR 170.607(d)(2)(i) & (ii)] for dermal and inhalation protection.

Except when using an enclosed cab that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.305] for dermal and inhalation protection, applicators must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R, or P filter.

### Soybeans

Mixers and Loaders must use Engineering Controls that meet the requirements listed in the WPS for agricultural pesticides (40 CFR 170.607(d)(2)(i) & (ii)) for dermal and inhalation protection.

## ENGINEERING CONTROLS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.607(d-f)), the handler PPE requirements may be reduced or modified as specified in the WPS.

### USER SAFETY RECOMMENDATIONS

User should:

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

## ENVIRONMENTAL HAZARDS

For terrestrial uses: **DO NOT** apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwater or rinsate.

**Ground Water:** This product 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:** This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several

months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of the chemicals in this product 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.

## 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.

### 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 the label about personal protective equipment (PPE), restricted-entry interval, and notification to workers. 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 workers to enter during the restricted-entry interval (REI). The REI and exceptions are listed in the Directions for Use associated with the crop. Notify workers of the exception (including when entry is permitted for each of the tasks named in the exception).

**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 made of any waterproof material
- Shoes plus socks

## INFORMATION

Axiom® DF Herbicide is a selective herbicide for control of many annual grasses and certain broadleaf weeds in winter wheat and fall seeded triticale, perennial grasses grown for seed, timothy grown for seed or hay, field corn, corn grown for silage, and soybeans.

### ENVIRONMENTAL AND BIOLOGICAL ACTIVITY

Axiom DF Herbicide controls weeds by interfering with seed germination and seedling development. Axiom DF Herbicide contains two different active ingredients with different modes of action for weed control. Flufenacet is an oxyacetamide, (Group 15) which inhibits very long chain fatty acids and metribuzin is a triazinone, (Group 5) a PSII Site A inhibitor. Axiom DF Herbicide acts primarily as a shoot inhibitor on susceptible weeds. It is important for best weed control results to have Axiom DF Herbicide in place and activated with moisture prior to weed emergence.

## USE RESTRICTIONS

Axiom DF Herbicide is for use on soybeans, field corn, corn grown for silage, grasses grown for seed, timothy grown for seed or hay, winter wheat, fall seeded triticale and field corn grown for seed. **DO NOT** apply to popcorn or sweet corn.

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

**DO NOT** use flood irrigation to apply, activate, or incorporate Axiom DF Herbicide.

**DO NOT** apply more than 23 oz Axiom DF Herbicide (0.78 lb ai/A flufenacet, 0.19 lb ai/A metribuzin) per acre per year in corn, 13 oz (0.44 lb ai/A flufenacet, 0.11 lb ai/A metribuzin) per acre per year in soybeans or annual grasses grown for seed, and 10 oz (0.34 lb ai/A flufenacet, 0.08 lb ai/A metribuzin) per acre per year in winter wheat or timothy grown for seed or hay. **DO NOT** apply more than 13 oz of Axiom DF Herbicide (0.44 lb ai/A flufenacet, 0.11 lb ai/A metribuzin) per acre per season for perennial grasses grown for seed with a maximum of 2 seasons per year.

For all metribuzin products used, **DO NOT** apply more than a total of 1 lb ai/A per year of metribuzin.

Field corn seed should be planted a minimum of 1-1/2 inches deep and soybean seed should be planted a minimum of 1 inch deep.

If any crop treated with Axiom DF Herbicide is lost, field corn or soybeans may be replanted immediately. **DO NOT** make a second application of Axiom DF Herbicide.

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sinkholes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.

Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum 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 containment.

This product must be used in a manner, which will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures, or rinsates.

#### SPRAY DRIFT

1. When using ground application equipment, apply with nozzle height no more than 4 feet above the ground or crop canopy.
2. Applicators are required to use Medium droplet size (ASABE S572.1).
3. **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
4. **DO NOT** apply during temperature inversions.

#### SPRAY DRIFT ADVISORIES

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

#### IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. **APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS!** See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.

#### Controlling Droplet Size

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. **WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER- CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.**
- Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

#### BOOM HEIGHT

Setting the boom at the lowest referenced height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### WIND

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. **AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS.**

Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

#### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

## TEMPERATURE INVERSIONS

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

## SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

## POLLINATOR ADVISORY STATEMENT

This product contains an herbicide, therefore follow all label directions and precautions to minimize potential off-target exposure in order to prevent effects to non-target plants adjacent to the treated site which may serve as habitat or forage for pollinators, including monarch butterflies (and larvae), birds, and bats.

## RESISTANCE MANAGEMENT

AXIOM DF Herbicide is a Group 15 Herbicide (inhibition of very long chain fatty acids) and Group 5 Herbicide (Photosystem II Inhibitor). A given weed population may contain or develop resistance to a herbicide after repeated use. Appropriate resistance-management strategies should be followed to mitigate or delay resistance. The following Integrated Weed Management Techniques are effective in reducing problems with herbicide resistant weed biotypes. It is best to use multiple practices to manage or delay resistance, as no single strategy is likely to be totally effective.

- **Rotate crops.** Crop rotation diversifies weed management.
- **Rotate herbicide-tolerant traits.** Alternate herbicide-tolerant (HT) traits and/or use HT trait stacks for more efficient rotation.
- **Use multiple herbicide sites of action.** Use tankmix partners and multiple SOAs during both the growing season and from year to year to reduce the selection pressure of a single SOA.
- **Know your weeds, know your fields.** Closely monitor problematic areas with difficult-to-control weeds or dense weed populations. User should scout before and after application.
- **Start with clean fields.** Effective tillage or the use of a burndown herbicide program can control emerged weeds prior to planting.
- **Stay clean – use residual herbicides.** Regardless of tillage system, pre-emergence or early post-emergence soil-applied residual herbicides should be used when possible.
- **Apply herbicides correctly.** Ensure proper application, including timing, full use-rates and appropriate spray volumes.
- **Control weed escapes.** Consider spot herbicide applications, row wicking, cultivation or hand removal of weeds or other techniques to stop weed seed production and improve weed management.
- **Zero tolerance – reduce the seed bank. DO NOT** allow surviving weeds to set seed, which will help decrease weed populations from year to year and prevent major weed shifts.
- **Clean equipment.** Prevent the spread of herbicide-resistant weeds and their seeds.

Contact your local extension specialist, certified crop advisory and /or Bayer CropScience representative for additional resistance management or IPM recommendation. Also for more information on Weed Resistance Management, visit the Herbicide Resistance Action Committee (HRAC) on the web at <http://www.hracglobal.com>.

## MIXING INSTRUCTIONS

Always follow the label instructions of the tankmix partner as well as Axiom DF Herbicide. Compatibility of Axiom DF Herbicide or its labeled tank mix products should always be predetermined prior to spraying. Check the compatibility of Axiom DF Herbicide and the tankmix partner(s) by mixing all components in the order specified in the **Mixing Order** section and water, in a small separate container to evaluate compatibility prior to adding them to the tank.

Axiom DF Herbicide is a dry flowable herbicide that must be mixed in water. For optimal spray tank mixing convenience and efficiency, Axiom DF Herbicide is recommended to be added to the spray tank via an eductor system.

Before mixing Axiom DF Herbicide and its labeled tank mix partners, examine the spray equipment making sure it is completely clean and free of rust or corrosion. Be sure the equipment is free of any residues from previously used pesticides. Flush lines with clean water or recommended detergents after the last application. Use an approved method for disposing of rinsate.

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sinkholes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.

Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material



removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum 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 containment.

This product must be used in a manner, which will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures, or rinsates.

## MIXING ORDER

The proper mixing sequence for Axiom DF Herbicide and recommended tank mixtures with water carrier is as follows:

1. Fill sprayer tank to  $\frac{1}{4}$  to  $\frac{1}{2}$  full with water. Start the agitation.
2. Slowly add required Axiom DF Herbicide through the eductor system or to the spray tank slowly while agitation is running.
3. If tank mixing with wettable powders or other dry flowable products, they may be added now.
4. If tank mixing with emulsifiable concentrates or soluble products, add the products to the spray tank now.
5. Complete addition of water to fill the sprayer tank.
6. Vigorously agitate spray tank contents for an additional 5 minutes prior to beginning application.
7. Maintain agitation until application of sprayer contents is complete.

Axiom DF Herbicide and all registered mixtures should be kept agitated once mixed and then sprayed immediately. Upon completion of application of each spray tank, check and clean 50 mesh in line filter(s). Repeat this step following each load. It is recommended to check individual nozzle filters every third tank load. **DO NOT** allow mixtures to stand for prolonged periods of time, no more than 12 hours.

## APPLICATION INFORMATION

Apply Axiom DF Herbicide alone or in combination with recommended tank mixes as a broadcast spray in 10 or more gallons of water per acre. Rainfall and/or overhead sprinkler irrigation is necessary to move Axiom DF Herbicide into the upper soil surface where weed seeds germinate.

**GROUND APPLICATION:** Axiom DF Herbicide may be applied by ground equipment only. Apply as a broadcast spray by ground equipment in 10 or more gallons of water per acre.

Confirm that spray tank is equipped with a sparge tube agitator, mechanical agitation devices or jet agitator devices that are capable of providing vigorous agitation while mixing. Accurately calibrate the sprayer prior to mixing the herbicide treatment to deliver the product(s) in at least 10 GPA of water.

The use of screens to protect the pump and nozzles is recommended. Screens placed on the suction side of the pump should be 16-mesh or coarser. Equip sprayer with 50 mesh in line filter(s) located between the pump discharge and the spray boom. This filter may be located prior to each spray boom section. If nozzle filters are used, use 50 mesh or coarser nozzle filters as recommended by nozzle manufacturer. **DO NOT** place a screen in the recirculation line. Application must be made at a sufficient spray pressure and volume to provide accurate and uniform application of spray particles to a given area without causing spray drift to non-target areas.

Refer to the nozzle manufacturer for proper nozzle, pressure setting and sprayer speed for optimum product performance and minimal spray drift. Maintain consistent ground speed while applying product to ensure proper distribution.

Agitate thoroughly before and during application with either bypass or mechanical agitation. Maintain adequate in-tank agitation to keep the spray mixture in suspension and provide a minimum of 20% bypass at all times.

## TANK CLEANUP PROCEDURE

1. Drain the tank completely, and then wash out tank, boom and hoses with clean water. Drain again.
2. Half fill the tank with clean water and add ammonia (i.e., 3% domestic ammonia solution) at a dilution rate of 1% (i.e., 1 gallon of domestic ammonia for every 100 gallons of rinsate). Complete filling of the tank with water. Agitate/recirculate and flush through boom and hoses. Leave agitation on for 10 minutes. Drain tank completely.
3. Repeat step 2.
4. Remove nozzles and screens and soak them in a 1% ammonia solution. Inspect nozzles and screens and remove visible residues.
5. Flush tank, boom, and hoses with clean water.
6. Inspect tank for visible residues. If present, repeat step 2.



## **AXIOM DF HERBICIDE USE IN WINTER WHEAT AND FALL SEEDED TRITICALE**

Axiom DF Herbicide may be used to control certain annual grass and broadleaf weeds when applied after the crop has fully germinated to early postemergence in winter wheat. Axiom DF Herbicide may be applied alone, in tankmix combination and in a sequential herbicide program with other registered herbicides.

### **CROP**

Plant wheat at a depth of 1 – 2 inches. Axiom DF Herbicide may be applied after the crop has fully germinated up to a maximum of 2 leaves emerged. Application to the crop between spiking and 2 leaf is preferred in most areas however, in WA, OR, and ID only, as long as the wheat is planted at a depth of 1.5" or deeper, application may be made upon wheat germination or later up until 2 leaves have emerged.

For pre-emergent use in Wheat: The REI is 12 hours. For post-emergent use in Wheat: The REI is 2 days.

Excessive rainfall after application may cause crop injury to young seedlings.

**Variety selection:** Commonly grown varieties have shown excellent tolerance to Axiom DF Herbicide but tolerance of all varieties to Axiom DF Herbicide is not known and Axiom DF Herbicide may cause crop injury. You should consult with a local Cooperative Extension agent or Bayer CropScience representative for specific regional information. If a variety or hybrid has not been tested (especially newly released varieties), treat only a small area until tolerance is confirmed before treating large acreages.

## AXIOM DF HERBICIDE USE RATES

Axiom DF Herbicide use rates are based on soil type. Select the appropriate rate from the following table:

AXIOM DF HERBICIDE IN WINTER WHEAT AND TRITICALE		
Axiom DF Herbicide Broadcast Rates/A		APPLICATION TIMINGS AND REMARKS
Soil Texture	Rate (oz of Axiom DF Herbicide/A)	
<b>Coarse Texture</b> (Sand, Loamy sand and Sandy loam)	4 – 6	Apply specified rate for soil type as a uniform broadcast spray using 10 or more gallons of water per acre.  <b>DO NOT</b> add crop oil concentrates, vegetable oils and/or petroleum oils to the tankmixture as crop injury may occur.  Crop Timing: Wheat at spiking – 2 leaf *  Weed Timing: Preemergence up to 1 leaf
<b>Medium Texture</b> (Loam, Silt loam, Silt, Sandy clay loam and Sandy clay)	6 - 8	
<b>Fine Texture</b> (Silty clay loam, Silty clay, Clay loam and Clay)	8 – 10	

\* In WA, OR, and ID only, as long as the wheat is planted at a depth of 1.5" or deeper, application may be made upon wheat germination or later up until 2 leaves have emerged.

## WEED CONTROL

Axiom DF Herbicide is applied preemergence to the weeds for the control of many important annual grass and broadleaf species. For most thorough weed control results, Axiom DF Herbicide followed by a postemergence herbicide application is recommended.

Axiom DF Herbicide is applied and subsequently moved into the soil by rainfall, sprinkler irrigation prior to weed emergence. Less than 1/2 inch of rainfall or irrigation within 2 weeks following application may result in reduced weed control.

Weed control may be reduced if excessive straw from the previous crop is present at Axiom DF Herbicide application. If excessive straw is present, uniformly spread the straw across the field, and/or remove/burn the straw prior to application.

### Best Management Practices:

- 1) Control any emerged weeds at or prior to planting by tillage or through the application of a nonselective herbicide
- 2) Make Axiom DF Herbicide applications prior to the 1-leaf stage of growth of the weed
- 3) Use the highest specified rate by soil type
- 4) Follow the Axiom DF Herbicide treatment with a postemergence application of a herbicide such as Osprey to control weeds that may emerge later

WEEDS CONTROLLED PREEMERGENCE BY AXIOM DF HERBICIDE	
Weeds Controlled	
ANNUAL GRASSES	ANNUAL BROADLEAF WEEDS
Bluegrass, annual ( <i>Poa annua</i> ) Canarygrass, hood ( <i>Phalaris paradoxa</i> ) Fescue, rattail ( <i>Vulpia myuros</i> ) Ryegrass, Italian ( <i>Lolium multiflorum</i> )* Ventenata ( <i>Ventenata dubia</i> ) Windgrass ( <i>Apera interrupta</i> )	Chickweed, mouseear ( <i>Cerastium vulgatum</i> ) Falseflax, smallseed ( <i>Camelina microcarpa</i> ) Henbit ( <i>Lamium amplexicaule</i> ) Mustard, blue ( <i>Chorispora tenella</i> ) Mustard, tumble ( <i>Sisymbrium altissimum</i> ) Radish, wild ( <i>Raphanus raphanistrum</i> )

\* In many instances, commercially acceptable control of annual ryegrass will require a sequential application of a postemergence herbicide such as Osprey in the spring.

## WEEDS PARTIALLY CONTROLLED BY AXIOM DF HERBICIDE

Axiom DF Herbicide applied up to early postemergence of weeds at specified rates will partially control many annual grass and broadleaf weeds.

ANNUAL GRASSES	ANNUAL BROADLEAF WEEDS
Barley, foxtail ( <i>Hordeum jubatum</i> ) Blackgrass ( <i>Alopecurus myosuroides</i> ) Brome, downy ( <i>Bromus tectorum</i> ) Brome, ripgut ( <i>Bromus rigidus</i> ) Brome, soft ( <i>Bromus mollis</i> ) Brome, California ( <i>Bromus carinatus</i> ) Crabgrass, large ( <i>Digitaria sanguinalis</i> ) Foxtail, spp. ( <i>Setaria</i> spp.) Oat, wild ( <i>Avena fatua</i> )	Chickweed, common ( <i>Stellaria media</i> ) Fiddleneck, coast ( <i>Amsinckia intermedia</i> ) Fiddleneck, tarweed ( <i>Amsinckia lycopsoides</i> ) Lambsquarters, common ( <i>Chenopodium album</i> ) Mayweed chamomile ( <i>Anthemis cotula</i> ) Pigweed spp. ( <i>Amaranthus</i> spp.) Prickly lettuce ( <i>Lactuca serriola</i> ) Shepherdspurse ( <i>Capsella bursa-pastoris</i> )

Partially controlled weeds will be stunted in growth and/or be reduced in number as compared to non-treated areas but performance may not be commercially acceptable. Weed control may vary from poor to excellent depending on soil characteristics, stage of growth at application and environmental conditions at and following application.

## HERBICIDE TANKMIXES WITH AXIOM DF HERBICIDE

To expand the spectrum of weed control of both annual grasses and broadleaf weeds, Axiom DF Herbicide may be tank mixed with other preemergence herbicides. Use of crop oil concentrates, vegetable oils and/or petroleum oils are *not* recommended as crop injury is likely.

With all tankmix partners, read and follow use directions, rates, precautions, timing, recropping restrictions, grazing interval restrictions, and recommendations on the respective labels.

### Possible tank-mix partners include:

Amber	Glyphosate*
Finesse	OLYMPUS® 70% Water Dispersible Granular Herbicide**
Glean	Sencor***

\* Glyphosate may be added as a tankmix partner prior to wheat emergence.

**\*\* For use in WA, ID and OR Only:** Axiom DF Herbicide may be tank-mixed with 0.6 oz/a of OLYMPUS 70% Water Dispersible Granular Herbicide. 0.6 oz OLYMPUS® 70% Water Dispersible Granular Herbicide per acre is equal to 0.0263 lbs propoxycarbazone active ingredient per acre. **DO NOT** exceed 1.2 oz of OLYMPUS 70% Water Dispersible

Granular Herbicide per acre or 0.0525 lbs propoxycarbazone active ingredient per acre in a crop year. This limit includes any products which also contain propoxycarbazone used on the same acre.

**\*\*\* For use in WA, ID and OR Only:** Axiom DF Herbicide may be tank-mixed with Sencor (or an equivalent metribuzin product) at the appropriate rate for soil type but the total amount of active ingredient metribuzin may not exceed 0.5 lb metribuzin per acre per 365 day period.

## AXIOM DF HERBICIDE FOLLOWED BY POSTEMERGENCE HERBICIDES

For most thorough weed control results, Axiom DF Herbicide followed by a postemergence herbicide application is recommended. Axiom DF Herbicide is applied as directed and then followed by application of other herbicides postemergence to the crop and weeds.

Suggested postemergence products include: Osprey, OLYMPUS 70% Water Dispersible Granular Herbicide, and Sencor\*. Refer to the individual product labels for instructions on specified use rates, precautions, and/or restrictions.

For sequential applications of Axiom DF Herbicide and Sencor (or equivalent metribuzin product), **DO NOT** exceed a total of 0.5 pounds of metribuzin active ingredient per 365 day period. Allow a minimum of 21 days between sequential applications of Axiom DF Herbicide and Sencor if wheat is actively growing, or 45 days between applications if wheat has entered dormancy or is stressed by frost, disease, insects, drought, excessive moisture, or any other stress factor. Crop injury may occur with this treatment.

## PRECAUTIONS FOR AXIOM DF HERBICIDE USE IN WINTER WHEAT AND FALL SEEDED TRITICALE

- Certain winter wheat varieties may be sensitive to Axiom DF Herbicide. Not all available winter wheat varieties and hybrids may have been tested for tolerance. If a variety or hybrid has not been tested (especially newly released varieties), treat only a small area until tolerance is established before treating large acreages.
- A field bioassay must be conducted for crops not listed on this label and for crops listed on the label for which a shorter plant-back interval than listed is desired.

## **RESTRICTIONS FOR AXIOM DF HERBICIDE USE IN WINTER WHEAT AND FALL SEEDED TRITICALE**

- **DO NOT** apply Axiom DF Herbicide by air or through any type of irrigation equipment.
- **DO NOT** apply to wheat seeded at a depth of less than 1 inch.
- **DO NOT** apply more than 10 oz of Axiom DF Herbicide per acre per year.
- **DO NOT** apply in tank mixtures with crop oil concentrates (COC), vegetable, and/or petroleum oils as crop injury may result.
- Regardless of the bioassay results, **DO NOT** plant any crop other than those listed closer than 4 months after an Axiom DF Herbicide application.
- **DO NOT** graze winter wheat within 30 days of Axiom DF Herbicide application.

## **AXIOM DF HERBICIDE USE IN ANNUAL AND PERENNIAL GRASSES GROWN FOR SEED**

Axiom DF Herbicide may be applied to certain annual and established perennial grasses grown for seed for the management of certain grass and broadleaf weeds and volunteer grasses.

For pre-emergent use in grasses grown for seed: The REI is 12 hours. For post-emergent use in grasses grown for seed: The REI is 3 days for hand-set irrigation and 2 days for all other activities.

### **ANNUAL GRASSES GROWN FOR SEED OREGON ONLY**

In the state of Oregon, Axiom DF Herbicide may be applied as a shielded banded treatment in annual ryegrass grown for seed.

**Row Spray Application - For Use in Annual Ryegrass grown for seed.**

Crop	Axiom DF Herbicide Rate (Oz per acre)
Annual Ryegrass	8 to 10
<b>REMARKS</b> Apply specified rate per <b>treated</b> acre as a band spray application to remove unwanted excessive volunteer annual ryegrass, and weeds such as annual bluegrass from the treated bands. Apply using shielded sprayers to prevent drift to unsprayed rows where the desired seed grass crop is grown. Use the following formula to calculate the amount of Axiom DF Herbicide needed for band treatments: $\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \frac{\text{Broadcast rate}}{\text{per A}} = \frac{\text{Band rate}}{\text{per A}}$ Use with a registered contact herbicide such as glyphosate to remove volunteers and weeds, which have germinated and emerged prior to treatment.	
<b>WEEDS CONTROLLED OR SUPPRESSED</b> <i>Annual Bluegrass</i> <i>Bromus*</i> <i>Italian (annual) ryegrass</i> <i>Rattail Fescue</i> <i>Rough Bluegrass</i> Volunteers of the established crop * indicates suppression.	
<b>RESTRICTIONS:</b> <ul style="list-style-type: none"> <li>• <b>DO NOT</b> allow animals to graze treated fields for a minimum of 30 days following application.</li> <li>• <b>DO NOT</b> apply by aerial application.</li> <li>• <b>DO NOT</b> make more than one application per year.</li> <li>• <b>DO NOT</b> apply more than 10 oz of Axiom DF Herbicide per acre per year.</li> <li>• For all metribuzin products used, <b>DO NOT</b> apply more than a total of 1 lb ai/A per year of metribuzin.</li> <li>• <b>DO NOT</b> apply this product through any type of irrigation equipment.</li> </ul>	

**SPECIAL PRECAUTIONS**

**DO NOT** apply in tank-mixture with postemergence herbicides, such as Diuron. Application of oxyfluorfen or photosynthetic inhibiting postemergence herbicides within 4 weeks of Axiom DF Herbicide applications may cause crop damage.

Weed control may be reduced if excessive straw from the previous crop is present at Axiom DF Herbicide application or if insufficient rainfall/irrigation occurs after application.

**PERENNIAL GRASSES GROWN FOR SEED Washington, Oregon- (except for Jefferson County) and Idaho.**

Axiom DF Herbicide may be applied to established stands of perennial tall fescue, fine fescue, perennial ryegrass, Orchard-grass and bluegrass. Use only on fields which are at least one year old or have had at least one seed harvest. Use on perennial ryegrass after the second harvest may result in crop injury.

**WEED CONTROL**

Axiom DF Herbicide applied early postemergence at specified rates will control many important annual grass and broadleaf weeds. Apply specified dosage as a broadcast spray in labeled perennial grasses prior to weed emergence from the soil up to the 2-leaf stage of growth of volunteer grasses. Applications made after mid-November may result in excessive crop injury and/or failure to control weeds.

Weed control may be reduced if excessive straw from the previous crop is present at Axiom DF Herbicide application. If excessive straw is present, uniformly spread the straw across the field, and/or remove the straw prior to application.

Axiom DF Herbicide may be applied in a band between rows in annual ryegrass grown for seed to control unwanted volunteer ryegrass and annual bluegrass from the treated areas.

## WEED CONTROL WITH AXIOM DF HERBICIDE

GRASS WEEDS CONTROLLED	
Bluegrass, annual ( <i>Poa annua</i> ) Bluegrass, roughstalk ( <i>Poa trivialis</i> ) Canarygrass, hood ( <i>Phalaris paradoxa</i> )	Fescue, rattail ( <i>Vulpia myuros</i> ) Ryegrass, Italian ( <i>Lolium multiflorum</i> ) Ventenata ( <i>Ventenata dubia</i> )

CONTROL OF ANNUAL VOLUNTEERS OF THE ESTABLISHED CROP	
Bluegrass ( <i>Poa spp.</i> ) Fescue, tall ( <i>Festuca arundinacea</i> ) Fescue, fine ( <i>Festuca tenuifolia</i> )	Orchardgrass ( <i>Dactylis glomerata</i> ) Ryegrass, perennial ( <i>Lolium perenne</i> )

GRASS WEEDS PARTIALLY CONTROLLED *	
Barley, foxtail ( <i>Hordeum jubatum</i> ) Brome, downy ( <i>Bromus tectorum</i> ) Brome, ripgut ( <i>Bromus rigidus</i> ) Brome, soft ( <i>Bromus mollis</i> )	Bromegrass, California ( <i>Bromus carinatus</i> ) Crabgrass, large ( <i>Digitaria sanguinalis</i> ) Foxtail spp. ( <i>Setaria spp.</i> ) Oat, wild ( <i>Avena fatua</i> )

ANNUAL BROADLEAF WEED CONTROL	
Controlled	Partially Controlled *
Chickweed, mouseear ( <i>Cerastium vulgatum</i> ) Falseflax, smallseed ( <i>Camelina microcarpa</i> ) Henbit ( <i>Lamium amplexicaule</i> ) Mustard, blue ( <i>Chorispora tenella</i> ) Mustard, tumble ( <i>Sisymbrium altissimum</i> ) Radish, wild ( <i>Raphanus raphanistrum</i> )	Chickweed, common ( <i>Stellaria media</i> ) Fiddleneck, coast ( <i>Amsinckia intermedia</i> ) Fiddleneck, tarweed ( <i>Amsinckia lycopsoides</i> ) Lambsquarters, common ( <i>Chenopodium album</i> ) Mayweed chamomile ( <i>Anthemis cotula</i> ) Pigweed spp. ( <i>Amaranthus spp.</i> ) Prickly lettuce ( <i>Lactuca serriola</i> ) Shepherdspurse ( <i>Capsella bursa-pastoris</i> )

\* Partially controlled weeds may be stunted in growth and/or be reduced populations as compared to non-treated areas but control will generally not be commercially acceptable.



## AXIOM DF HERBICIDE RATE SELECTION

Axiom DF Herbicide use rates are based on soil type. **DO NOT** use on soils with less than 1.0% organic matter, or on soils with a pH greater than 7.5. **DO NOT** use on clay knobs or poorly covered subsoils as severe injury may occur.

Use on perennial ryegrass after the second harvest may result in crop injury. Use 8 to 10 oz/A to minimize the potential for injury.

Select the appropriate rate from the following table:

RATE DIRECTIONS FOR AXIOM DF HERBICIDE in PERENNIAL GRASSES GROWN FOR SEED			
Axiom DF Herbicide Broadcast Rate Per Acre <sup>1</sup>			
CROP	East of the Cascade Mountains		West of the Cascade Mountains
	Loamy sand and sandy loam soils 1.0% or greater O.M.	Medium and fine textured soils 1.5% or greater O.M.	All Soil Textures
Bermudagrass ( <i>Cynodon dactylon</i> ) Fescue, fine ( <i>Festuca tenuifolia</i> ) Fescue, tall ( <i>Festuca arundinacea</i> ) Ryegrass, perennial ( <i>Lolium perenne</i> )	6 to 9 oz	9 to 13 oz	9 to 13 oz
Bluegrass, perennial ( <i>Poa pratensis</i> ) Orchardgrass ( <i>Dactylis glomerata</i> )	<b>DO NOT</b> use		
<sup>1</sup> Use the higher rate of Axiom DF Herbicide within the applicable rate range under any of the following conditions: Heavy surface vegetation residues, heavy weed pressure, heavier soil textures, and/or greater O.M. content.			

## AXIOM DF HERBICIDE IN TANK MIXTURES AND/OR SEQUENTIAL APPLICATIONS

Axiom DF Herbicide may be either tankmixed or used sequentially with most registered herbicides to broaden the spectrum of weeds controlled. Refer to the individual product labels for specific use rates, application timings and/or precautions and restrictions. Always follow the most restrictive label.

- **DO NOT** tank mix Axiom DF Herbicide with Diuron, Karmex or other photosynthetic inhibitor herbicides. Allow a minimum of four weeks between application of Axiom DF Herbicide and photosynthetic inhibitor herbicides.
- Axiom DF Herbicide may be tank-mixed with oxyfluorfen, however sequential applications of Axiom DF Herbicide and oxyfluorfen must be separated by a minimum of four weeks.

**Please See Information on Resistance Management, Mixing Instructions, Mixing Order, Application Information, and Tank Cleanup Procedure.**

## RESTRICTIONS FOR AXIOM DF HERBICIDE USE IN PERENNIAL GRASSES GROWN FOR SEED:

1. **DO NOT** apply more than 13 oz of Axiom DF Herbicide per acre per season for perennial grasses with a maximum of 2 seasons per year.
2. One application per season.
3. **DO NOT** apply this product through any type of irrigation equipment or by air.
4. **DO NOT** use on soils with less than 1.0% organic matter, or on soils with pH greater than 7.5.
5. **DO NOT** use on clay knobs or poorly covered subsoils.
6. **DO NOT** tank mix Axiom DF Herbicide with Diuron, Karmex or other photosynthetic inhibitor herbicides.
7. Allow at least 120 days between application and harvest of seed grass.
8. **DO NOT** graze within 30 days of an Axiom DF Herbicide application.
9. Use only on fields which are at least one year old or have had at least one seed harvest. Use on perennial ryegrass after the second harvest may result in crop injury.
10. Allow a minimum of four weeks between application of Axiom DF Herbicide and photosynthetic inhibitor herbicides.

## **AXIOM USE IN TIMOTHY GROWN FOR SEED OR HAY (Washington, Oregon (except Jefferson County) and Idaho)**

Axiom DF Herbicide may be applied to established stands of timothy grown for seed or hay for the management of certain grass and broadleaf weeds and volunteer grasses. Use only on fields which are at least one year old or have had at least one seed or hay harvest. Please note that early crop response is typically apparent as the crop emerges from dormancy in the spring. This crop response is transient and recovery occurs as spring progresses.

### **WEED CONTROL**

Axiom DF Herbicide applied early postemergence at specified rates will control many important annual grass and broadleaf weeds. Apply specified dosage as a broadcast spray prior to weed emergence from the soil up to the 2-leaf stage of growth of volunteer grasses. Applications made after mid-November may result in excessive crop injury and/or failure to control weeds.

For pre-emergent use in timothy grown for seed or hay: The REI is 12 hours. For post-emergent use in timothy grown for seed or hay: The REI is 3 days for hand-set irrigation and 2 days for all other activities.

Weed control may be reduced if excessive straw from the previous crop is present at Axiom DF Herbicide application. If excessive straw is present, uniformly spread the straw across the field, and/or remove the straw prior to application.

**SEE TABLE in grasses grown for seed section for specific information on weeds controlled.**

### **AXIOM DF HERBICIDE RATE SELECTION**

Axiom DF Herbicide use rates are based on soil type. **DO NOT** use on soils with less than 1.0% organic matter or on soils with a pH greater than 7.5. **DO NOT** use on clay knobs or poorly covered subsoils as severe injury may occur.

Select the appropriate rate from the following table:

<b>RATE DIRECTIONS FOR AXIOM DF HERBICIDE in TIMOTHY GROWN FOR SEED OR HAY</b>			
Axiom DF Herbicide Broadcast Rate Per Acre <sup>1</sup>			
<b>CROP</b>	<b>East of the Cascade Mountains</b>		<b>West of the Cascade Mountains</b>
	Loamy sand and sandy loam soils 1.0% or greater O.M.	Medium and fine textured soils 1.5% or greater O.M.	All Soil Textures
Timothy( <i>Phleum pratense</i> )	<b>DO NOT</b> use	8 to 10 oz	8 to 10 oz
<sup>1</sup> Use the higher rate of Axiom DF Herbicide within the applicable rate range under any of the following conditions: Heavy surface vegetation residues, heavy weed pressure, heavier soil textures, and/or greater O.M. content.			

## AXIOM DF HERBICIDE IN TANK MIXTURES

Axiom DF Herbicide may be tankmixed with most registered herbicides to broaden the spectrum of weeds controlled. Refer to the individual product labels for specific use rates, application timings and/or precautions and restrictions. Always follow the most restrictive label.

- **DO NOT** tank mix Axiom DF Herbicide with Diuron, Karmex or other photosynthetic inhibitor herbicides. Allow a minimum of four weeks between application of Axiom DF Herbicide and photosynthetic inhibitor herbicides.

**SEE INFORMATION on Resistance Management, Mixing Instructions, Mixing Order, Application Information and Tank Cleanup Procedure.**

## RESTRICTIONS FOR AXIOM DF HERBICIDE USE IN TIMOTHY GROWN FOR SEED OR HAY:

1. **DO NOT** apply more than 10 oz Axiom DF Herbicide per acre per year.
2. If planning to utilize Axiom DF herbicide in timothy grown for seed or hay, cutting height of the hay in the fall prior to application should be no less than 3.5 inches.
3. Apply treatments prior to November 15<sup>th</sup> to avoid excessive crop injury and/or failure to control weeds.
4. **DO NOT** graze timothy following an application of Axiom DF Herbicide as unacceptable injury may occur.
5. One application only per year.
6. **DO NOT** apply this product through any type of irrigation equipment or by air.
7. **DO NOT** use on soils with less than 1.0% organic matter, or on soils with pH greater than 7.5.
8. **DO NOT** use on clay knobs or poorly covered subsoils.
9. **DO NOT** tank mix Axiom DF Herbicide with Diuron, Karmex or other photosynthetic inhibitor herbicides.
10. Allow a minimum of four weeks between application of Axiom DF Herbicide and photosynthetic inhibitor herbicides.
11. Allow at least 120 days between application and harvest of seed or hay.
12. Use only on fields which are at least one year old or have had at least one seed or hay harvest.

## **INFORMATION FOR AXIOM DF HERBICIDE USE in FIELD CORN, CORN GROWN FOR SILAGE AND SOYBEANS**

Axiom DF Herbicide is a selective herbicide for control of many annual grasses and certain broadleaf weeds in field corn, corn grown for silage, and soybeans. Axiom DF Herbicide may be applied preplant surface, preplant incorporated (mix into the top 1 to 2 inch layer of soil) and preemergence. Axiom DF Herbicide will provide its most effective weed control when applied and subsequently moved into the soil by rainfall, sprinkler irrigation, or mechanical tillage prior to weed emergence. Axiom DF Herbicide controls weeds by interfering with seed germination and seedling development.

Axiom DF Herbicide may be applied using either water or sprayable fluid fertilizer as a liquid carrier.

Axiom DF Herbicide may be applied either alone or in tank mix combination with additional herbicides. When tank mixing, always observe all precautionary statements and limitations on labeling of all products.

Dry weather following preemergence application of Axiom DF Herbicide or recommended tank mixtures may reduce effectiveness. Cultivate if weeds develop.

For pre-emergent use in corn and soybeans: The REI is 12 hours. For post-emergent use in corn: The REI is 4 days for hand-set irrigation and 24 hours for all other activities.

For post-emergent use in soybeans: The REI is 2 days.

### **RATE SELECTION/SOIL TEXTURE**

The specified rates of Axiom DF Herbicide are defined by texture and organic matter content of the soil being treated. Unless a specific soil texture is mentioned, rate tables throughout this label refer to the following three soil texture groups: coarse, medium and fine. If you are not sure how to classify your soil, contact your Bayer CropScience representative, the Cooperative Extension Service or other knowledgeable person. The following chart includes a complete listing of soil textures included in each of the soil textures groupings:

<b>COARSE</b>	<b>MEDIUM</b>	<b>FINE</b>
Sand	Loam	Silty clay loam
Loamy sand	Silt loam	Silty clay
Sandy loam	Silt	Clay loam
	Sandy clay loam	Clay
	Sandy clay	

### **MIXING INSTRUCTIONS**

#### **Liquid Carriers:**

Axiom DF Herbicide is a dry flowable herbicide that must be mixed in water or sprayable fluid fertilizer. Compatibility of Axiom DF Herbicide or its labeled tank mix products with these liquid carriers should always be predetermined prior to spraying. Refer to the SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST (Appendix I) of this label to determine product compatibility in fluid fertilizer carriers.

Before mixing Axiom DF Herbicide and its labeled tank mixtures, examine the spray equipment making sure it is completely clean and free of rust or corrosion. Be sure the equipment is free of any residues from previously used pesticides. Flush lines with clean water or recommended detergents after the last application. Use an approved method for disposing of rinsate.

For optimal spray tank mixing convenience and efficiency, Axiom DF Herbicide is recommended to be added to the spray tank via an eductor system.

The proper mixing sequence for Axiom DF Herbicide and recommended tank mixtures with the appropriate liquid carrier is as follows:

1. Fill the spray tank or nurse tank 1/4 full with the appropriate liquid carrier.
2. Start recirculation and agitation system and continue throughout mixing and application.
3. If the compatibility test indicates the need of a compatibility agent, add the recommended amount of compatibility agent to the spray tank.
4. If ammonium sulfate is to be used, add it now.
5. Next add the specified quantity of Axiom DF Herbicide through the eductor system or to the spray tank [slowly add Axiom DF Herbicide if water or sprayable grade nitrogen fertilizers (28-0-0, 32-0-0) are the carriers; for other sprayable grade fertilizers first check compatibility and then either mix directly or preslurry first in water depending on the results of the compatibility test].
6. If tank mixing with wettable powders or other dry flowable products in water as the carrier, they may be added now. If tank mixing these products in a sprayable grade fertilizer carrier, first preslurry these products with water and then slowly add them to any sprayable grade fertilizer carrier.
7. If tank mixing with emulsifiable concentrates or soluble products, add the products to the spray tank.
8. If tank mixing with a glyphosate- containing product or Touchdown®, add the products to the spray tank.

9. If mixing spray adjuvants in the mixture, add them after all other products have been mixed.
10. Fill the spray tank to the desired level with the appropriate liquid carrier.
11. Continue agitation during transport and application until the spray tank is empty.

Axiom DF Herbicide and all registered mixtures should be kept agitated once mixed and then sprayed immediately. **DO NOT** allow mixtures to stand for prolonged periods of time. Water quality, pH, temperature and/or other components of the mixture may affect how long the mixture may stand before application.

## APPLICATION INFORMATION

### SPRAYER APPLICATION

**Ground Broadcast Treatment:** Accurately calibrate the sprayer prior to mixing the herbicide treatments. Apply Axiom DF Herbicide and the labeled tank mixtures in a minimum of 10 gallons of total spray volume per acre using broadcast boom equipment. Use a pump with capacity to maintain 30 to 40 psi at the nozzles, maintain adequate in-tank agitation to keep the spray mixture in suspension and provide a minimum of 20% bypass at all times. Application must be made at a sufficient spray pressure and volume to provide accurate and uniform application of spray particles to a given area without causing spray drift to non-target areas. If mixed with other labeled herbicides, the spray volume may be no less than the minimum volume recommended by the tank mix product or 10 gallons, whichever is greater. The use of screens to protect the pump and nozzles is recommended. Screens placed on the suction side of the pump should be 16-mesh or coarser. **DO NOT** place a screen in the recirculation line. Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles. Refer to the nozzle manufacturer for additional recommendations. Agitate thoroughly before and during application with either bypass or mechanical agitation. Rinse the sprayer thoroughly with clean water immediately after each use.

**Band Treatment:** Axiom DF Herbicide and the labeled tank mixtures may be applied as a band treatment. Use the following formula to calculate the amount of herbicide needed for band treatments:

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \frac{\text{Broadcast rate}}{\text{per acre}} = \frac{\text{Band rate}}{\text{per acre}}$$

### APPLICATION METHODS AND TIMING

Axiom DF Herbicide may be applied either alone or in tank mixtures with or sequentially with certain other registered and recommended herbicides provided that, for tank mixes, the labeling for the other herbicide does not prohibit such mixing. Applications may be made preplant surface, preplant incorporated, or preemergence. Axiom DF Herbicide may be used in either a single or split application program. **DO NOT** apply when environmental conditions favor drift.

**Preplant Surface:** For use in conservation, minimum or no-tillage crop production systems, Axiom DF Herbicide alone or as a recommended tank mixture may be applied as a broadcast spray up to 45 days before planting field corn and 14 days before planting soybeans. A sequential application is recommended for applications made 30 to 45 days prior to planting, where 2/3 of the highest specified broadcast rate for the crop and soil texture is applied initially and the remaining 1/3 is applied at planting. Treatments made less than 30 days before planting may use either a single or a sequential application. If weeds are present at the time of application, apply the Axiom DF Herbicide treatment in tank mixture with a recommended nonselective herbicide such as a glyphosate-containing product or Touchdown. If possible, **DO NOT** move treated soil out of the row or move untreated soil to the soil surface during planting, as weed control may be reduced.

**Preplant Incorporation:** Apply Axiom DF Herbicide alone or in combination with recommended tank mixes as a broadcast spray and incorporate into the upper 1 to 2 inches of the soil surface up to 14 days before planting. Avoid deep incorporation since reduced weed control and/or crop injury may result. Incorporate with implements, which provide uniform, shallow incorporation (example -finishing disk, harrow, rolling cultivator, etc.)

**Pre-emergence:** Axiom DF Herbicide alone and its recommended tank mixes may be applied to the soil surface as a broadcast spray or band application after planting of the crop but prior to weed or crop emergence. If weeds are present at the time of application, apply Axiom DF Herbicide with a nonselective herbicide such as a glyphosate-containing product or Touchdown. Rainfall and/or overhead sprinkler irrigation is necessary to move Axiom DF Herbicide into the upper soil surface where weed seeds germinate. Dry weather conditions following application may reduce weed control. If adequate moisture is not received within 7 to 10 days after applications and weeds begin to emerge from the soil, a light rotary hoeing or shallow incorporation (no deeper than 1/2 inch deep) will improve performance and minimize crop damage. Excessive rainfall or irrigation after application may reduce weed control.

**Special Applications: Fall Application** (for use only in IA, MN, ND, SD, WI, north of Route 20 in NE, north of Route 136 in IL, and north of Interstate 70 in OH):

Following harvest of crops in the fall, Axiom DF Herbicide may be applied to crop stubble after October 15, when the sustained soil temperature at the four-inch soil depth is less than 50 °F, but before the ground is frozen. This application is limited to only medium- and fine-textured soils with an organic matter of 2.5% or greater and which will be planted to field corn the following spring. The soil may be tilled before or after application with incorporation depth no more than two to three inches following herbicide application. If a spring application of Axiom DF Herbicide follows the fall application, the total Axiom DF Herbicide rate for both applications must not exceed 23 oz.

## CORN (FIELD AND SEED AND SILAGE)

Axiom DF Herbicide is a selective herbicide for control of most annual grasses and selected annual broadleaf weeds in field corn. A single or split application program may be used and the product may be applied alone or in tank-mix combination with certain registered herbicides. The following types of applications are allowed: preplant surface, preplant incorporated and preemergence. Most effective weed control will occur when the applied product is moved into the soil by rainfall, sprinkler irrigation, or mechanical tillage prior to weed emergence from the soil.

For pre-emergent use in corn: The REI is 12 hours. For post-emergent use in corn: The REI is 4 days for hand-set irrigation and 24 hours for all other activities.

**Special Precautions (Field Seedcorn Inbreds):** Field seedcorn inbred lines may vary in their response to Axiom DF Herbicide. **DO NOT** apply Axiom DF Herbicide to inbreds without first verifying with your local seedcorn company (supplier) the Axiom DF Herbicide selectivity on your inbred line.

Application timing for Axiom DF Herbicide on field seedcorn inbreds are **only** preplant surface and preemergence. **DO NOT apply preplant incorporated.**

**DO NOT apply** Axiom DF Herbicide on field seedcorn inbreds grown on coarse textured soils with less than 1.0% organic matter.

### WEED SPECIES CONTROLLED BY AXIOM DF HERBICIDE

Axiom DF Herbicide applied at specified dosages and application timings will control many important annual grasses and broadleaf weeds.

WEEDS CONTROLLED <sup>1</sup>	
ANNUAL GRASS WEEDS	
Barnyardgrass ( <i>Echinochloa crusgalli</i> )	Johnsongrass (seedling) ( <i>Sorghum halepense</i> )
Crabgrass, large ( <i>Digitaria sanguinalis</i> )	Lovegrass, India ( <i>Eragrostis sp</i> )
Crabgrass, smooth ( <i>Digitaria ischaemum</i> )	Panicum, browntop ( <i>Panicum fasciculatum</i> )
Foxtail, giant ( <i>Setaria faberi</i> )	Panicum, fall ( <i>Panicum dichotomiflorum</i> )
Foxtail, green ( <i>Setaria viridis</i> )	Signalgrass, broadleaf ( <i>Brachiaria platyphylla</i> )
Foxtail, yellow ( <i>Setaria glauca</i> )	Witchgrass ( <i>Panicum capillare</i> )
Goosegrass ( <i>Eleusine indica</i> )	
ANNUAL BROADLEAF WEEDS	
Beggarweed, Florida ( <i>Desmodium tortuosum</i> )	Purslane, common ( <i>Portulaca oleracea</i> )
Carpeweed ( <i>Mullugo verticillata</i> )	Pusley, Florida ( <i>Richardia scabra</i> )
Galinsoga spp. ( <i>Galinsoga</i> spp.)	Spurge, spotted ( <i>Euphorbia maculata</i> )
Lambsquarters, common <sup>1</sup> ( <i>Chenopodium album</i> )	Waterhemp, common <sup>1,2</sup> ( <i>Amaranthus rudis</i> )
Pigweed spp. <sup>1</sup> ( <i>Amaranthus</i> spp.)	Waterhemp, tall <sup>1,2</sup> ( <i>Amaranthus tuberculatus</i> )
<sup>1</sup> These treatments may not provide acceptable control of triazine-resistant biotypes. <sup>2</sup> Due to extended germination intervals, full season control may not always be achieved, especially following preplant surface applications. To complement control, Axiom DF Herbicide should be used in tank-mixtures or sequentially with other herbicides that provide additional control of these weed species.	



## WEED SPECIES PARTIALLY CONTROLLED BY AXIOM DF HERBICIDE

Axiom DF Herbicide will provide partial control or reduced competition for many additional grass and broadleaf weeds. Reduced competition weeds will be stunted in growth and/or be reduced populations as compared to non-treated areas but control will generally not be commercially acceptable.

WEED SPECIES PARTIALLY CONTROLLED	
ANNUAL GRASS/SEDGE WEEDS	
Cupgrass, woolly ( <i>Eriochloa villosa</i> )	Panicum, Texas ( <i>Panicum texanum</i> )
Millet, wild-proso ( <i>Panicum milliaceum</i> )	Sandbur, field ( <i>Cenchrus incertus</i> )
Nutsedge, yellow ( <i>Cyperus esculentus</i> )	Shattercane ( <i>Sorghum bicolor</i> )
ANNUAL BROADLEAF WEEDS	
Jimsonweed ( <i>Datura stramonium</i> )	Ragweed, common ( <i>Ambrosia artemisiifolia</i> )
Ladysthumb ( <i>Polygonum persicaria</i> )	Sida, prickly ( <i>Sida spinosa</i> )
Marestail ( <i>Conyza canadensis</i> )	Smartweed, Pennsylvania ( <i>Polygonum pensylvanicum</i> )
Mustard spp. ( <i>Brassica</i> spp.)	Sunflower, common ( <i>Helianthus annuus</i> )
Nightshade, eastern black ( <i>Solanum ptycanthum</i> )	Velvetleaf ( <i>Abutilon theophrasti</i> )

## AXIOM DF HERBICIDE USE RATES IN PREPLANT SURFACE, PREPLANT INCORPORATED AND PREEMERGENCE APPLICATIONS

**For FALL Application ( For use only in IA, MN, ND, SD, WI, north of Route 20 in NE, north of Route 136 in IL, and north of Interstate 70 in OH):**

After October 15, when the sustained soil temperature at the four-inch soil depth is less than 50 °F, Axiom DF Herbicide may be applied to remaining crop stubble following harvest. In conservation, minimum and no-tillage systems on soils having 2.5% organic matter or greater, apply Axiom DF Herbicide at 19 to 23 oz/A on *medium textured soils* and 23 oz/A on *fine textured soils*. Apply before the ground is frozen.

The soil may be tilled before or after application with an incorporation depth no more than two to three inches following the fall application. Minimize furrow and ridge formation in the tillage operations after application of Axiom DF Herbicide. If a spring application is made, the total rate of both fall and spring must not exceed the maximum total rate for field corn, or illegal residues may occur.

**For CONVENTIONAL Tillage Systems with Applications Made TWO WEEKS OR LESS Preplant Surface, Preplant Incorporated and Preemergence Applications**

Axiom DF Herbicide use rates are located in Table 1. Rates are based on soil texture and organic matter and are for applications made within two weeks of planting and until corn emergence. **DO NOT** use on peat or muck soil (soils with 20% or more organic matter).

TABLE 1

AXIOM DF HERBICIDE USE RATES IN CONVENTIONAL TILLAGE APPLICATIONS MADE TWO WEEKS OR LESS PREPLANT SURFACE, PREPLANT INCORPORATED, OR PREEMERGENCE.					
AXIOM DF HERBICIDE RATE (oz/A). <sup>1,2</sup>					
SOIL TEXTURAL GROUP <sup>3</sup>	SOIL ORGANIC MATTER CONTENT				
	<0.5%	0.5 to 1%	1 to 1.5%	1.5 to 3%	>3 %
COARSE	8 oz	8 to 10 oz	10 to 12 oz	13 oz	15 oz
MEDIUM	10 to 15 oz		15 to 18 oz		17 to 20 oz
FINE	20 to 22 oz				20 to 23 oz

<sup>1</sup> Use the higher rate of Axiom DF Herbicide within the applicable rate range under any of the following conditions: heavy surface plant residues, heavy weed pressure and/or when soil organic matter is at the upper end of the range.

<sup>2</sup> If soil pH is >7.4, use the lower rate of the rate range shown.

<sup>3</sup> For more information, refer to the "Rate Selection/Soil Texture" section of this label.

**AXIOM DF HERBICIDE USE RATES IN CONSERVATION, MINIMUM, AND NO-TILLAGE SYSTEMS OR CONVENTIONAL TILLAGE SYSTEMS WITH APPLICATIONS GREATER THAN TWO WEEKS PREPLANT SURFACE.**

Axiom DF Herbicide use rates are located in Table 2. Rates are higher for these types of tillage systems and application timings than in Table 1 due to the extended period of weed control needed and the increased crop residue present. Refer to the "Application Methods and Timing" section of the label for details. Weed control will generally be greater the closer the applications are made to planting but prior to weed emergence. **DO NOT** use on peat or muck soil (soils with 20% or more organic matter).

TABLE 2

AXIOM DF HERBICIDE USE RATES IN CONSERVATION, MINIMUM, AND NO-TILLAGE SYSTEMS; OR CONVENTIONAL TILLAGE SYSTEMS WITH APPLICATIONS GREATER THAN TWO WEEKS PREPLANT SURFACE.					
AXIOM DF HERBICIDE RATES (oz/A). <sup>1, 2</sup>					
SOIL TEXTURAL GROUP <sup>3</sup>	SOIL ORGANIC MATTER CONTENT				
	<0.5%	0.5 to 1%	1 to 1.5%	1.5 to 3%	>3%
COARSE	9 oz	9 to 11 oz	11 to 13 oz	14 oz	16 oz
MEDIUM	11 to 18 oz		18 to 20 oz		19 to 22 oz
FINE	20 to 23 oz				

<sup>1</sup> Use the higher rate of Axiom DF Herbicide within the applicable rate range under any of the following conditions: heavy surface plant residues, heavy weed pressure and/or when soil organic matter is at the upper end of the range.

<sup>2</sup> If soil pH is > 7.4, use the lower rate of the rate range shown.

<sup>3</sup> For more information, refer to the "Rate Selection/Soil Texture" section of this label.

## AXIOM DF HERBICIDE TANK MIXTURES

If a broader spectrum of weed control is required, Axiom DF Herbicide may be tank mixed with certain recommended herbicides. Mixtures may be used in conventional, conservation, minimum, and / or no-tillage systems. They may be applied with similar timings and methods as Axiom DF Herbicide alone unless specifically prohibited in the mix partner's product label. Three-way or multiple tank mixtures are permitted unless restricted by the product label. In conservation, minimum or no-till systems where emerged weeds are present at the time of application, Axiom DF Herbicide alone and/or tank mixtures may also be tank mixed with glyphosate-containing products, and/or Touchdown to provide burndown of emerged weeds. For additional broadleaf control, an appropriate formulation of 2, 4-D may be added to the mixtures.

Refer to individual product labels for use rates, precautions, and/or restrictions. Apply in accordance with the most restrictive of label limitations and precautions. Label dosage rates must not be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

Axiom DF Herbicide may be tank-mixed with the listed products provided the product to be tank-mixed is registered for this use site.

Herbicides recommended for tank mixtures with Axiom DF Herbicide include:

2,4-D LVE	Clarity®	Marksman®	Roundup Ultra®
Atrazine	Glyphosate	Prowl®	Sencor®
Balance®	Hornet®	Python®	Touchdown®
Banvel®		Roundup®	

Specific information for each tank mix product are provided in the following text. Refer to the individual product labels for additional information concerning use rates, precautions, and/or restrictions.

### AXIOM DF HERBICIDE plus ATRAZINE:

Use the specified use rate of Axiom DF Herbicide as shown below with the labeled use rate of atrazine.

USE RATES FOR AXIOM DF HERBICIDE (oz/A)			
SOIL TEXTURAL	ORGANIC MATTER CONTENT **		
	< 1%	1 to 3%	> 3%
COARSE	4 to 6 oz	8 to 11 oz	11 oz
MEDIUM	8 to 11 oz	11 to 15 oz	15 oz
FINE	<3 % 15 oz		>3% 15 to 19 oz
USE RATES FOR ATRAZINE (oz/A)			
(0.5 to 2.0 lb ai/A are labeled use rates)			
For improved control of broadleaf weeds such as groundcherry, nightshade, common ragweed, giant ragweed*, mustards, jimsonweed, kochia (non-triazine resistant), sicklepod*, velvetleaf*, common cocklebur*, and annual morningglory.			
Applications may be made preplant surface, preplant incorporated, and/or preemergence.			
<b>DO NOT</b> apply more than two weeks prior to planting in preplant surface applications on coarse textured soils.			
* Weeds are partially controlled (suppressed).			
** Use the lower rate range of Axiom DF Herbicide on soils with <1% organic matter and/or soil pH of >7.4.			

**AXIOM DF HERBICIDE plus BALANCE:**

In addition to the weeds controlled by Axiom DF Herbicide alone, Axiom DF Herbicide at rates suggested in Tables 1 or 2 when mixed with the suggested rates of Balance as shown below will improve control of many weeds.

<b>USE RATES FOR BALANCE (oz 75 WDG/A)</b>		
<b>APPLICATION TIMING</b>	<b>COARSE TEXTURED SOILS**</b>	<b>MEDIUM/FINE TEXTURED SOILS</b>
	<b>Conventional tillage/Conservation tillage/No-till</b>	<b>Conventional tillage/Conservation tillage/No-till</b>
<b>Preemergence</b>	0.75 to 1 oz	1.5 to 2.0 oz
<b>Preplant Surface or Incorporated (0 to 7 days before planting)</b>		
<b>Preplant Surface or Incorporated (8 to 14 days before planting)</b>	1.0 to 1.5 oz	2.0 to 2.5 oz
<b>ADDITIONAL WEEDS CONTROLLED AND COMMENTS</b> For improved control of palmer amaranth, buffalobur, common chickweed, seedling dandelion, jimsonweed, kochia, Venice mallow, marestail, wild mustard, nightshades (eastern, black), field pennycress, broadleaf plantain, triazine resistant weeds (pigweeds, common lambsquarters), common ragweed, shepherds-purse, Pennsylvania smartweed, velvetleaf, waterhemp (common, tall), wild radish, woolly cupgrass*, wild proso millet*		
* Weeds may require an appropriate postemergence herbicide application for control of late season escapes. ** On coarse textured soils with < 1.5% organic matter and/or soil pH > 7.4, use Balance at 0.5 to 0.67 oz/acre and Axiom DF Herbicide at 4 to 8 oz. Use the high rates as organic matter content increases.		

Axiom DF Herbicide may be tank-mixed with the listed products provided the product to be tank-mixed is registered for this use site. In the following tank mixes, use Axiom DF Herbicide at use rates specified in Tables 1 or 2 plus the specified labeled use rate of the tank mix partner.

<b>AXIOM DF HERBICIDE Plus:</b>	
<b>TANK MIX PARTNER (Labeled Use Rates)</b>	<b>ADDITIONAL WEEDS CONTROLLED</b>
<b>Banvel/Clarity</b> (1 pt/A)  <b>Marksman</b> (3.5 pt/A)	kochia, ladythumb, Pennsylvania smartweed, marestail, Venice mallow, nightshade, common ragweed, jimsonweed*, velvetleaf*, common cocklebur*, morningglory sp.*, sicklepod, waterhemp and triazine-resistant weeds
<b>Preplant and preemergence applications only.</b> Use only on fields which are flat planted (no furrows) Avoid direct contact with the corn seed or injury may result. <b>Apply only</b> to medium and fine textured soils with > 2% organic matter.	

<b>AXIOM DF HERBICIDE Plus:</b>	
<b>TANK MIX PARTNER</b> (Labeled Use Rates)	<b>ADDITIONAL WEEDS CONTROLLED</b>
<b>Prowl</b> (0.75 to 1.5 lb ai/A)	velvetleaf, triazine-resistant weeds
<b>Preemergence application only.</b> <b>DO NOT</b> apply preplant incorporate as serious corn damage may result.	
<b>Hornet</b> (3.2 to 4.8 oz/A)	common cocklebur, marestail, jimsonweed, kochia, ladysthumb, Pennsylvania smartweed, Venice mallow, morningglory*, common ragweed, giant ragweed*, Russian thistle, sicklepod, prickly sida, common sunflower, velvetleaf, tall waterhemp, wild mustard, black nightshade, triazine-resistant weeds and Canada thistle**
Apply preplant surface, preplant incorporate and/or preemergence. <b>DO NOT</b> apply to areas where the soil pH is >7.8. <b>DO NOT</b> apply to areas with a soil pH < 5.9 and organic matter > 5% (Both must apply). Use of Hornet on soils that average < 1.5% organic matter may result in corn damage.	
<b>Python</b> (0.89 to 1.33 oz/A)	marestail, ladysthumb, Pennsylvania smartweed, Venice mallow, common cocklebur*, jimsonweed*, nightshade (black, cutleaf, eastern black, hairy), velvetleaf, wild mustard, Russian thistle, prickly sida, waterhemp sp., sicklepod*, common ragweed*, giant ragweed*, morningglory sp*, wild sunflower, triazine-resistant weeds
Apply preplant surface, preplant incorporate and/or preemergence. Use of Python on soils that average < 1.5% organic matter may result in corn damage.	
<b>Sencor</b> (0.05 to 0.114 lb ai/A)	ladysthumb, Pennsylvania smartweed, prickly sida, velvetleaf, common ragweed, waterhemp sp.*
Apply preplant incorporate and/or preemergence. <b>DO NOT</b> use on coarse textured soils with < 1.5% organic matter. This product contains metribuzin. The maximum application rate of 23 oz is equivalent to applying 0.136 lbs metribuzin ai/A. <b>DO NOT</b> exceed a total Metribuzin (Sencor) rate of 0.187 lb ai/A on soils with < 2% organic matter and 0.25 lb ai/A on all other soils per year.	

<b>AXIOM DF HERBICIDE Plus:</b>	
<b>TANK MIX PARTNER</b> (Labeled Use Rates)	<b>ADDITIONAL WEEDS CONTROLLED</b>
<b>2,4-D</b> (low volatile ester) (1/4 to 1 lb ai/A)	common cocklebur, mustards, common ragweed, giant ragweed, jimsonweed, morningglory sp., sunflower, velvetleaf, dandelion*,
Apply preplant surface and/or preemergence. Apply 7 to 14 days prior to planting or 3 to 5 days after planting but before corn emergence. <b>DO NOT</b> use on light, sandy soils, or where soil moisture is inadequate for normal weed growth.	
<b>Glyphosate/Touchdown</b> (0.375 to 4 lb ai/A)	Annual and perennial weeds
Apply before or after planting but prior to corn emergence For use in conservation, minimum and no-till systems.	
* Weeds are partially controlled (suppressed) ** Burndown weed control in minimum and no-till field corn only	

## AXIOM DF HERBICIDE SEQUENTIAL APPLICATIONS

Sequential herbicide applications either before or following Axiom DF Herbicide treatments may be used to control additional weeds. Herbicides recommended for sequential applications include:

Atrazine	Bromoxynil	Liberty®	Resource®
Accent®	Bromoxynil + Atrazine	Lightning®	Roundup®
Aim®	Buctril®	Marksman®	Roundup Ultra®
Balance®	Buctril + Atrazine®	Permit®	Scorpion III®
Banvel®	Buctril Gel®	Poast®	Sencor®
Basagran®	Clarity®	Prowl®	2,4-D
Basis®	Exceed®	Pursuit®	
Battalion®	Glyphosate	Python®	
Beacon®	Hornet®	Resolve®	

Refer to the above information and the individual product labels for detailed explanations on use rates and directions and special precautions/restrictions.

## SOYBEAN

Axiom DF Herbicide is a selective herbicide for the control/suppression of annual grasses and selected broadleaf weeds in soybeans. Axiom DF Herbicide may be applied once per year either alone or in tank mix combination with or sequentially with certain registered herbicides. The following types of application are allowed: preplant surface, preplant incorporated and preemergence. The preplant surface and preplant incorporate treatments may be applied up to 14 days before planting. The most effective weed control will occur when the applied product is moved into the soil by rainfall, sprinkler irrigation, or mechanical tillage prior to weed emergence from the soil.

**DO NOT** graze or feed forage, hay, or straw to livestock.

For pre-emergent use in soybeans: The REI is 12 hours. For post-emergent use in soybeans: The REI is 2 days.

## WEED SPECIES CONTROLLED BY AXIOM DF HERBICIDE

Axiom DF Herbicide applied alone at the specified dosages and application timings will provide control of certain annual grasses and broadleaf weeds.

WEEDS CONTROLLED <sup>1</sup>	
ANNUAL GRASS WEEDS	
Barnyardgrass ( <i>Echinochloa crusgalli</i> )	Foxtail, yellow ( <i>Setaria glauca</i> )
Crabgrass, large ( <i>Digitaria sanguinalis</i> )	Goosegrass ( <i>Eleusine indica</i> )
Crabgrass, smooth ( <i>Digitaria ischaemum</i> )	Lovegrass, India ( <i>Eragrostis</i> sp)
Foxtail, giant ( <i>Setaria faberi</i> )	Panicum, fall ( <i>Panicum dichotomiflorum</i> )
Foxtail, green ( <i>Setaria viridis</i> )	
ANNUAL BROADLEAF WEEDS	
Carpetweed ( <i>Mullugo verticillata</i> )	Purslane, common ( <i>Portulaca oleracea</i> )
Galinsoga spp. ( <i>Galinsoga</i> spp.)	Spurge, spotted ( <i>Euphorbia maculata</i> )
<sup>1</sup> Full season weed control will be achieved only on coarse textured soils using the maximum 13-ounce use rate. Use rates of 7 to 13 oz will provide <b>only</b> early season weed control on all other soil textures. To complement early season weed control, Axiom DF Herbicide is recommended for use in tank-mixture with or sequentially with other herbicides that provide additional control of these weeds species.	



## WEED SPECIES PARTIALLY CONTROLLED BY AXIOM DF HERBICIDE

Axiom DF Herbicide will provide partial control or reduced competition for additional grass and broadleaf weeds. Reduced competition weeds will be stunted in growth and/or be of reduced populations as compared to non-treated areas but control will generally not be commercially acceptable.

WEED SPECIES PARTIALLY CONTROLLED	
ANNUAL GRASS WEEDS	
Johnsongrass, seedling ( <i>Sorghum halepense</i> ) Panicum, browntop ( <i>Panicum fasciculatum</i> ) Sandbur, field ( <i>Cenchrus incertus</i> )	Signalgrass, broadleaf ( <i>Brachiaria platyphylla</i> ) Shattercane ( <i>Sorghum bicolor</i> ) Witchgrass ( <i>Panicum capillare</i> )
ANNUAL BROADLEAF WEEDS	
Beggarweed, Florida ( <i>Desmodium tortuosum</i> ) Jimsonweed ( <i>Datura stramonium</i> ) Lambsquarters, common ( <i>Chenopodium album</i> ) Mustard spp. ( <i>Brassica</i> spp.) Pigweed spp. ( <i>Amaranthus</i> spp.)	Ragweed, common ( <i>Ambrosia artemisiifolia</i> ) Sida, prickly ( <i>Sida spinosa</i> ) Smartweed, Pennsylvania ( <i>Polygonum pensylvanicum</i> ) Waterhemp, common ( <i>Amaranthus rudis</i> ) Waterhemp, tall ( <i>Amaranthus tuberculatus</i> )

## AXIOM DF HERBICIDE USE RATES

The use rate for Axiom DF Herbicide applied alone, in tank- mix combination with and/or sequentially with other herbicides for all application methods and timings is **7 to 13 oz** per acre. The 13-ounce rate of Axiom DF Herbicide alone will provide full season control of annual grasses and certain broadleaf weeds in coarse textured soils but will provide **only** early season weed control on medium and fine textured soils. Rates lower than 13 oz will provide only early season weed control on all soil textures. To complement this early season weed control, Axiom DF Herbicide should be used in tank-mixture or sequentially with other herbicides that provide additional control of these weed species.

## AXIOM DF HERBICIDE TANK MIXTURES

If a broader spectrum of weed control or improved residual activity is required, Axiom DF Herbicide may be tank mixed with certain recommended herbicides. Mixtures may be used in conventional, conservation, minimum, and no-tillage systems. They may be applied with similar timings and methods as Axiom DF Herbicide alone unless specifically prohibited in the mix partner product label. Three-way or multiple tank mixtures are permitted unless restricted by the mix partner product labels. Refer to the individual product labels for use rates, precautions, and/or restrictions. Herbicides recommended for tank mixtures with Axiom DF Herbicide include:

Authority Broadleaf®	Glyphosate	Roundup®	Touchdown®
Canopy®	Linuron (Lorox® and others)	Roundup Ultra®	Trifluralin
Canopy XL®	Prowl®	Scepter®	2, 4D LVE
Command®	Pursuit®	Sencor® (Metribuzin)	
FirstRate®	Python®	Sonalan HFP®	

## AXIOM DF HERBICIDE SEQUENTIAL APPLICATIONS

Sequential herbicide applications may be used in an Axiom DF Herbicide weed control program to control additional weeds. Herbicides recommended for use either before or following Axiom DF Herbicide treatments include:

Assure II®	Fusilade®	Prowl®	Scepter®
Basagran®	Fusion®	Pursuit®	Select®
Canopy®	Galaxy®	Python®	Sencor®
Classic®	Glyphosate	Raptor®	Sonalan HFP®
Cobra®	Linuron	Reflex®	Storm®
Command®	Option II®	Reliance STS®	Synchrony STS®
Concert®	Pinnacle®	Resource®	Touchdown®
FirstRate®	Poast®	Roundup®	Trifluralin
Flexstar®	Poast Plus®	Roundup Ultra®	2, 4-D

Refer to the above information and the individual product labels for use directions, use rates, and special precautions/restrictions.

## CROP ROTATION RESTRICTIONS – ALL USES

To ensure safety of rotational crops, the following rotational intervals must be followed:

Immediately			
Corn, Field		Soybean	
7 Days			
Wheat <sup>1</sup> , Winter		Triticale <sup>1</sup> , Fall -seeded	
1 month			
	Potato		
4 months			
Carrot	Wheat, Spring	Wheat <sup>2</sup> , Winter	Triticale <sup>2</sup> , Fall -seeded
8 months			
Cotton			
12 months			
Alfalfa	Clover	Rice	Wild Rice
Barley	Fescue	Rye	Other crops not listed (except root crops)
Bermudagrass	Millet, pearl	Sorghum	
Bluegrass	Millet, prose	Teosinte	
Bromegrass	Oats		
Buckwheat	Popcorn		
18 months			
Onions	Sugarbeet	Other root crops not listed	

<sup>1</sup> Where rates of 10 oz/A or less have been applied.

<sup>2</sup> Where any other labeled rate of Axiom DF Herbicide greater than 10 oz/A has been applied.

In the event of a crop failure after application of Axiom DF Herbicide, only the crops listed above can be planted, after waiting the directed period of time. **DO NOT** make a second application of Axiom DF Herbicide.

In areas where a rotation to a desired crop is not specified, conduct a field bioassay as described in the **FIELD BIOASSAY** section of this label.

## FIELD BIOASSAY

A field bioassay must be conducted for crops not listed on this label and for crops listed on the label for which a shorter plant-back interval than listed is desired.

To conduct a field bioassay, plant strips of the crop you want to grow the season following Axiom DF Herbicide application. Monitor the crop for response to Axiom DF Herbicide treatment to determine if the crop can be grown safely in previously treated Axiom DF Herbicide areas.

Regardless of the bioassay results, **DO NOT** plant any crop other than those listed closer than 4 months after an Axiom DF Herbicide application.

## APPENDIX I

### SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST

A compatibility test is highly recommended for all applications with liquid fertilizers. Prior to mixing products in the spray tank, small quantities of each product can be mixed in proportionate quantities to evaluate compatibilities. The following test assumes a spray volume of 25 gallons per acre. If other spray volumes are to be used, adjust the appropriate amounts of ingredients. To check for compatibility, use the following procedure:

1. Add two inches of water to a one-quart jar fitted with a tight lid.
2. Add the appropriate amount of herbicide. If more than one product is used, the recommended mix sequence is the dry herbicide first, flowables next and emulsified concentrates last. For dry herbicides, add 1-1/2 level tsp/lb/A use rate and for liquids add 1/2 tsp/pt/A use rate.

3. Add one pint of the liquid fertilizer to the jar. Place the lid on the jar and gently shake the jar for one minute. Place the jar on a level surface and let it stand for 30 minutes.
4. Observe the mixture for signs of separation, flakes, gels, precipitates, etc. If none of these conditions occur, the mix is compatible.
5. If incompatible, use of a compatibility agent is recommended. Rerun the above test but first add a compatibility agent (1/4 tsp is equal to a use rate of 2 pt/100 gal spray mix) and gently shake the jar prior to adding herbicides.
6. If the mixture is now compatible, a compatibility agent should be used in the spray mixture at its recommended rate.
7. If the mixture is still incompatible, the liquid fertilizer and herbicides should not be mixed together for use in the same spray tank.

## STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. **DO NOT** walk through spilled material. Dispose of pesticide as directed below. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer CropScience Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer CropScience Emergency Response Telephone No. is 1-800-334-7577.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

### Container Disposal

#### [Non-Seed Treatment Products in Non-Refillable Containers]

##### **Rigid, Non-refillable containers (equal to or less than 5 gallons)**

Non-refillable container. **DO NOT** reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

##### **Rigid Non-refillable Containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs)**

Non-refillable container. **DO NOT** reuse or refill this container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows.

##### **Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)**

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal.

Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

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

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

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

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

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

##### **Non-Seed Treatment Products in Non-Refillable Fiber Drums with Liners**

Non-refillable container. **DO NOT** reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment, then offer for recycling if available or dispose of in a sanitary landfill or by incineration. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

##### **Non-Seed Treatment Products in Non-Rigid, Non-refillable Containers**

Nonrefillable container. **DO NOT** reuse or refill this container. Completely empty container into application equipment. Then offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

### **[Non-Seed Treatment Products in Refillable Containers]**

Refillable container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Contact your Ag retailer or Bayer CropScience for container return, disposal and recycling information.

#### **Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)**

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

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

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

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

End users are authorized to remove tamper evident cables as required to remove the product from the container unless the container is equipped with one way valves and refilling or returning is planned. If this is the case, end users are not authorized to remove tamper evident cables, one way valves or clean container.

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## CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

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Read the entire Directions for Use, Conditions, Disclaimer 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 Bayer CropScience. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

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### NET WEIGHT: 25 POUNDS

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