

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

MAY 10 2007

Mr. Mike See
Bayer CropScience
P.O. Box 12014
2 T.W. Alexander Drive
Research Triangle Park, NC 27709

Subject: Axiom DF Herbicide
EPA Registration No. 264-766
Revised labeling submitted March 23, 2007 to add uses on wheat and
grasses grown for seed

Dear Mr. See:

The amended labeling referred to above is acceptable provided that you adhere to the following conditions:

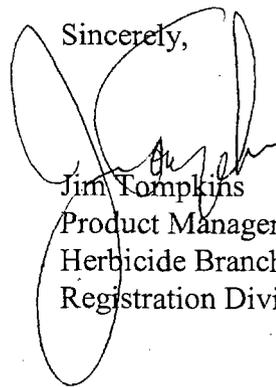
1. Make all of the changes specified on in the document "Summary of Comments on Microsoft Word - P Axiom DF Herbicide 10-25-04.doc".
2. Submit no later than December 30, 2009, a special comparative sensitivity study on thyroid hormone levels in neonatal and adult rats. The registrant should consult with the Agency in developing the protocol for the study.
3. Submit a 28-day inhalation toxicity study in rats no later than January 31, 2008.
4. Submit a standard for the FOE thioglycolate sulfoxide metabolite to the National Pesticide Standards Repository/Analytical Chemistry Branch/OPP, 701 Mapes Road, FortGeorge G. Meade, MD 20755-5350.
5. Submit two copies of final printed labeling within 30 days of receipt of this letter.

2/40

This labeling supercedes all previously accepted labeling for this product except for supplemental labeling. A stamped copy of the label is enclosed for your records.

If you have any questions about this letter, you may call Tobi Colvin-Snyder at 703-305-7801.

Sincerely,



Jim Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505P)

Summary of Comments on Microsoft Word - P Axiom DF Herbicide 10-25-04.doc

3/48

Page: 1

Author: tsnyder

Date: 5/8/2007 11:57:00 AM

000264-00766.20070323.P Axiom DF Herbicide 10-25-04 Shaded.tobicomments.pdf

Author: tsnyder
Subject: Inserted Text
Date: 5/8/2007 11:37:29 AM

T or rinsate

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Subject: Highlight
Date: 5/8/2007 11:17:00 AM

T Move to "Ground Water" section.

4/40

Author: tsnyder
Subject: Inserted Text
Date: 5/8/2007 11:18:37 AM

T For all metribuzin products used, do not apply more than a total of 1 lb ai/A per use season of metribuzin.

Author: tsnyder
Subject: Cross-Out
Date: 3/28/2007 10:19:39 PM

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5/4

Author: tsnyder
Subject: Replacement Text
Date: 3/28/2007 10:20:15 PM
T specified

Author: tsnyder
Subject: Cross-Out
Date: 5/8/2007 11:19:21 AM
T No longer registered.

6/40

Author: tsnyder
Subject: Inserted Text
Date: 3/28/2007 10:28:47 PM

T provided that, for tank mixes, the labeling for the other herbicide does not prohibit such mixing.

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Date: 3/28/2007 10:29:44 PM



Page: 7

Author: tsnyder
Subject: Highlight
Date: 4/3/2007 1:16:06 PM

T Move to text above table so that it is more prominent.

Author: tsnyder
Subject: Replacement Text
Date: 4/3/2007 1:16:59 PM

T Do not

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Subject: Cross-Out
Date: 3/28/2007 10:31:44 PM

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Author: tsnyder
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Date: 3/28/2007 10:32:37 PM

T See note above in table 1.

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Page: 14

Author: tsnyder
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T INSTRUCTIONS
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Page: 18

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ACCEPTED
with COMMENTS
in EPA Letter Dated

MAY 10 2007

Axiom[®] DF Herbicide

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 264-766

For weed control in corn, soybeans, winter wheat, and perennial grasses grown for seed.

ACTIVE INGREDIENTS:

- Flufenacet
N-(4-Fluorophenyl)-N-(1-methylethyl)-2-[[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]-oxy]acetamide 54.4%
- Metribuzin:
4-Amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4H)-one..... 13.6%

INERT INGREDIENTS: 32.0%
100.0%

EPA Reg. No. 264-766

EPA Est. No.

**STOP - Read the label before use
KEEP OUT OF REACH OF CHILDREN
CAUTION**

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

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed, inhaled or absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals. Avoid contact with skin, eyes, or clothing. Avoid breathing dust.

PERSONAL PROTECTIVE EQUIPMENT

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Shoes plus socks

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

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing 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

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwaters.

Do not allow sprays to drift onto adjacent desirable plants.

Metribuzin has properties that may result in ground water contamination. Application in areas where soils are permeable or coarse and groundwater is near the surface could result in groundwater contamination.

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

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

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 this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours following application.

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

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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

Axiom® DF Herbicide is a selective herbicide for control of many annual grasses and certain broadleaf weeds in field corn, white corn, corn grown for silage, perennial grasses grown for seed, wheat and triticale, and soybeans. Axiom® may be applied preplant surface, preplant incorporated (mix into the top 1 to 2 inch layer of soil) and preemergence. Axiom® 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® controls weeds by interfering with seed germination and seedling development.

Axiom® may be applied using either water or sprayable fluid fertilizer as a liquid carrier or be impregnated and applied on dry bulk fertilizer.

Axiom® 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® or recommended tank mixtures may reduce effectiveness. Cultivate if weeds develop.

GENERAL USE RESTRICTIONS

Axiom® DF Herbicide is for use on soybeans, field corn, white corn, corn grown for silage, perennial grasses grown for seed, wheat and triticale and field corn grown for seed. Do not apply to popcorn or sweetcorn.

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®.

Do not apply more than 23 ounces Axiom® per acre per use season in corn, 13 ounces per acre per use season in soybeans or perennial grasses grown for seed, and 10 ounces per acre per use season in winter wheat.

Do not apply Axiom® or Axiom® tank mixtures when environmental conditions may favor drift to non-target sites.

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® is lost, corn or soybeans may be replanted immediately. Do not make a second application of Axiom®.

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, 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.

RATE SELECTION / SOIL TEXTURE

The ~~recommended~~ 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:

COARSE	MEDIUM	FINE
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® 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® 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® is recommended to be added to the spray tank via an eductor system.

The proper mixing sequence for Axiom® 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 recommended quantity of Axiom® through the eductor system or to the spray tank [slowly add Axiom® 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 Gramoxone Extra®, 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® 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.

Dry Fertilizer Carriers:

Axiom® may be impregnated or coated on dry bulk fertilizers for application. Refer to Appendix II of this label for details.

APPLICATION INFORMATION

SPRAYER APPLICATION

Ground Broadcast Treatment: Accurately calibrate the sprayer prior to mixing the herbicide treatments. Apply Axiom® 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® 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:

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

DRY FERTILIZER APPLICATION

Apply using a minimum of 200 lb of dry fertilizer per acre. See Appendix II for additional details.

APPLICATION METHODS AND TIMING

Axiom® may be applied either alone or in tank mixtures with or sequentially with certain other registered and recommended herbicides. Applications may be made preplant surface, preplant incorporated or preemergence. Axiom® 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® alone or as a recommended tank mixture may be applied as a broadcast spray up to 45 days before planting in corn and 14 days before planting in soybeans. A sequential application is recommended for applications made 30 to 45 days prior to planting, where 2/3 of the highest recommended 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 sequential application. If weeds are present at the time of application, apply the Axiom® treatment in tank mixture with a recommended nonselective herbicide such as ~~Gramoxone Extra~~, 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® 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® with a nonselective herbicide such as ~~Gramoxone Extra~~, a glyphosate-containing product or Touchdown. Rainfall and/or overhead sprinkler irrigation is necessary to move Axiom® 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 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® follows the fall application, the total Axiom® rate for both applications must not exceed 23 ounces.

CORN (FIELD AND SEED)

Axiom® DF Herbicide is a selective herbicide for control of most annual grasses and selected annual broadleaf weeds in 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.

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

~~Recommended~~ application timing for Axiom® on field seedcorn inbreds are **only** preplant surface and preemergence. **Do not apply preplant incorporated.**

Do **not** apply Axiom® 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 ~~recommended~~ dosages and application timings will control many important annual grasses and broadleaf weeds.

WEEDS CONTROLLED ¹	
ANNUAL GRASS WEEDS	
Barnyardgrass (<i>Echinochloa crusgalli</i>)	Johnsongrass (seedling) (<i>Sorghum halepense</i>)
Crabgrass, large (<i>Digitaria sanguinalis</i>)	Lovegrass, India (<i>Eragrostis</i> sp)
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>)
Carpetweed (<i>Mullugo verticillata</i>)	Pusley, Florida (<i>Richardia scabra</i>)
Galinsoga spp. (<i>Galinsoga</i> spp.)	Spurge, spotted (<i>Euphorbia maculata</i>)
Lambsquarters, common ¹ (<i>Chenopodium album</i>)	Waterhemp, common ^{1,2} (<i>Amaranthus rudis</i>)
Pigweed spp. ¹ (<i>Amaranthus</i> spp.)	Waterhemp, tall ^{1,2} (<i>Amaranthus tuberculatus</i>)
¹ These treatments may not provide acceptable control of triazine-resistant biotypes.	
² Due to extended germination intervals, full season control may not always be achieved, especially following preplant surface applications. To complement control, Axiom® 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>Coryza canadensis</i>)	Smartweed, Pennsylvania (<i>Polygonum pennsylvanicum</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® 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 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®. If a spring application is made, the total rate of both fall and spring must not exceed the maximum total rate for corn, or illegal residues may occur.

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

Recommended Axiom® 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.

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 (OUNCES PER ACRE).^{1,2,3}

SOIL TEXTURAL GROUP ⁴	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

¹ Use the higher rate of Axiom® 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.
² If soil pH is >7.4, use the lower rate of the rate range shown.
³ ~~Not recommended for~~ use on peat or muck soils (soils with 20% or more organic matter).
⁴ 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.

Recommended Axiom® 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.

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 (OUNCES PER ACRE).^{1,2,3}

SOIL TEXTURAL GROUP ⁴	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				

¹ Use the higher rate of Axiom® 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.
² If soil pH is > 7.4, use the lower rate of the rate range shown.
³ ~~Not recommended for~~ use on peat or muck soils (soils with 20% or more organic matter).
⁴ 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® may be tank mixed with certain recommended herbicides. Mixtures may be used in either conventional, conservation, minimum and / or no-tillage systems. They may be applied with similar timings and methods as Axiom® 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® alone and/or tank mixtures may also be tank mixed with ~~Gramoxone Extra~~, 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. No label dosage rates should 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® include:

2,4-D LVE	Clarity®	Marksman®	Roundup Ultra®
Atrazine	Extrazine II®	Pentagon®	Sencor®
Balance®	Glyphosate	Prowl®	Touchdown®
Banvel®	Gramoxone Extra	Python®	
Cyanazine (Bladex® and others)	Hornet®	Roundup®	

Specific or general 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 ~~recommended~~ use rate of Axiom® as shown below with the labeled use rate of atrazine.

USE RATES FOR AXIOM® DF HERBICIDE (ounces per acre)			
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 (pounds per acre)			
(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.			
Do not 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® 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® alone, Axiom® 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.

USE RATES FOR BALANCE (Ounces 75 WDG per Acre)		
APPLICATION TIMING	COARSE TEXTURED SOILS**	MEDIUM / FINE TEXTURED SOILS
	Conventional tillage / Conservation tillage / No-till	Conventional tillage / Conservation tillage / No-till
Preemergence	0.75 to 1 oz	1.5 to 2.0 oz
Preplant Surface or Incorporated (0 to 7 days before planting)		
Preplant Surface or Incorporated (8 to 14 days before planting)	1.0 to 1.5 oz	2.0 to 2.5 oz
ADDITIONAL WEEDS CONTROLLED AND COMMENTS		
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, shepherdspurse, 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® 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® at use rates recommended in Tables 1 or 2 plus the recommended labeled use rate of the tank mix partner.

AXIOM® DF HERBICIDE Plus:	
TANK MIX PARTNER (Labeled Use Rates)	ADDITIONAL WEEDS CONTROLLED
Cyanazine (1 lb ai/A) Extrazine II (1.5 lb ai/A)	annual groundcherry, ladythumb, Pennsylvania smartweed, nightshade, common ragweed, kochia (non-triazine resistant), mustards, jimsonweed*, prickly sida, velvetleaf*, common cocklebur*, annual morningglory* and sunflower*
Preplant surface, preplant incorporate and preemergence applications Do not use on coarse textured soils. Do not use after December 31, 2002	
Banvel/Clarity (1 pint/A) Marksman (3.5 pints/A)	kochia, ladythumb, Pennsylvania smartweed, marestail, Venice mallow, nightshade, common ragweed, jimsonweed*, velvetleaf*, common cocklebur*, morningglory sp.*, sicklepod, waterhemp and triazine-resistant weeds
Preplant and preemergence applications only. Use only on field which are flat planted (no furrows) Avoid direct contact with the corn seed or injury may result. Apply only to medium and fine textured soils with > 2% organic matter.	

AXIOM® DF HERBICIDE Plus:	
TANK MIX PARTNER (Labeled Use Rates)	ADDITIONAL WEEDS CONTROLLED
Prowl/Pentagon (0.75 to 1.5 lb ai/A)	velvetleaf, triazine-resistant weeds
Preemergence application only. Do not apply preplant incorporate as serious corn damage may result.	
Hornet (3.2 to 4.8 oz/A)	common cocklebur, marestalk, jimsonweed, kochia, ladythumb, 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. Do not apply to areas where the soil pH is >7.8. Do not 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.	
Python (0.89 to 1.33 oz/A)	marestalk, ladythumb, 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.	
Sencor (0.05 to 0.114 lb ai/A)	ladythumb, Pennsylvania smartweed, prickly sida, velvetleaf, common ragweed, waterhemp sp.*
Apply preplant incorporate and/or preemergence. Do not 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) per acre. Do not 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 use season.	

AXIOM® DF HERBICIDE Plus:	
TANK MIX PARTNER (Labeled Use Rates)	ADDITIONAL WEEDS CONTROLLED
2,4-D (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. Do not use on light, sandy soils, or where soil moisture is inadequate for normal weed growth.	
Glyphosate / Touchdown (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.	
Gramoxone-Extra (1.5 to 3 pints/A)	Annual weeds and suppression of some perennials
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 corn only	

AXIOM® DF HERBICIDE SEQUENTIAL APPLICATIONS

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

Atrazine	Bromoxynil	Gramoxone-Extra®	Python®
Accent®	Bromoxynil + Atrazine	Hornet®	Resolve®
Aim®	Buctril®	Laddok S-12®	Resource®
Balance®	Buctril + Atrazine®	Liberty®	Roundup®
Banvel®	Buctril Gel®	Lightning®	Roundup Ultra®
Basagran®	Clarity®	Marksman®	Scorpion III®
Basis®	Contour®	Permit®	Sencor®
Battalion®	Exceed®	Poast®	Tough®
Beacon®	Extrazine II®	Prowl®	2,4-D
Bladex®	Glyphosate	Pursuit®	

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

PERENNIAL GRASSES GROWN FOR SEED ONLY

(Washington, Oregon [except for Jefferson Co.] and Idaho only)

AXIOM may be applied to established perennial grasses grown for seed for the control/suppression of weeds and volunteer grasses. Recommended perennial grasses for AXIOM use include established stands of tall fescue, fine fescue, perennial ryegrass, orchardgrass, and bluegrass.

Special Precautions and Restrictions:

1. Apply by ground application only.
2. Do not apply this product through any type of irrigation equipment.
3. Weed control may be reduced if excessive straw from the previous crop is present at AXIOM application. If excessive straw is present, uniformly spread the straw across the field, and/or remove/burn the straw prior to application.
4. Use only on fields which are at least one year old or have had at least one seed harvest.
5. Use on perennial ryegrass after the second harvest may result in crop injury. Use the rates of 8 to 10 oz/acre to minimize injury.
6. Do not use on soils with less than 1.0% organic matter, or on soils with pH greater than 7.5.
7. Do not use on clay knobs or poorly covered subsoils.

- 8. Do not tank mix AXIOM with Diuron, Karmex or other photosynthetic inhibitor herbicides. Allow a minimum of four weeks between application of AXIOM and photosynthetic-inhibitor herbicides.
- 9. AXIOM may be tank-mixed with oxyflourfen, however sequential applications of AXIOM and oxyflourfen must be separated by a minimum of four weeks.
- 10. Allow at least 120 days between application and harvest of seed grass.
- 11. Do not allow animals to graze treated fields for a minimum of 30 days following application.
- 12. Do not make more than one application per use season.
- 13. Do not apply more than 13 oz AXIOM per acre per use season.

GRASSES CONTROLLED OR PARTIALLY CONTROLLED BY AXIOM

AXIOM applied at recommended use rates will provide control/suppression of the following weeds:

GRASSES CONTROLLED/SUPPRESSED*	
Barley, foxtail* (<i>Hordeum jubatum</i>)	Canarygrass, hood (<i>Phalaris paradoxa</i>)
Bluegrass, annual (<i>Poa annua</i>)	Crabgrass, Large* (<i>Digitaria sanguinalis</i>)
Brome, downy* (<i>Bromus tectorum</i>)	Fescue, rattail (<i>Vulpia myuros</i>)
Brome, ripgut* (<i>Bromus rigidus</i>)	Foxtail spp.* (<i>Setaria spp.</i>)
Brome, soft (<i>Bromus mollis</i>)	Oats, wild* (<i>Avena fatua</i>)
Bromegrass, California (<i>Bromus carinatus</i>)	Ryegrass, annual (<i>Lolium multiflorum</i>)
Annual Volunteers of the established crop	
Bluegrass (<i>Poa spp.</i>)	Orchardgrass (<i>Dactylis glomerata</i>)
Fescue, tall (<i>Festuca arundinacea</i>)	Ryegrass, perennial (<i>Lolium perenne</i>)
Fescue, fine (<i>Festuca tenuifolia</i>)	
* Suppressed 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 USE RATES

AXIOM works best when applied as a preemergence to very early postemergence (1 to 2-leaf stage) application to weeds. Preemergence applications should be timed to occur just prior to, during, or immediately following the first fall rains or before late summer/early fall irrigations and prior to weed emergence. To maximize preemergence weed control, rainfall or irrigation is required after application but prior to weed emergence.

Recommended AXIOM use rates for preemergence/very early postemergence applications are located in the following table:

AXIOM DF IN PERENNIAL GRASSES GROWN FOR SEED			
AXIOM DF Broadcast Rate Per Acre ¹			
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 Fescue, Fine Fescue, Tall Ryegrass, perennial	6 to 9 oz	9 to 13 oz	9 to 13 oz
Bluegrass, perennial (<i>Poa pratensis</i>) Orchardgrass	Do not use		
<p>REMARKS: Apply specified dosage as a broadcast spray prior to weed emergence from the soil to no later than 1 to 2 leaf stage of volunteer grasses (Early Postemergence). Apply by ground equipment in 10 or more gallons of spray solution per acre. Applications made after mid-November may result in excessive crop injury and/or failure to control weeds</p>			
<p>¹ Use the higher rate of AXIOM 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.</p>			

AXIOM USE IN TANK MIXTURES AND/OR SEQUENTIAL APPLICATIONS

AXIOM may be either tankmixed or used sequentially with most additional 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.

SOYBEAN

Axiom® is a selective herbicide for the control/suppression of annual grasses and selected broadleaf weeds in soybeans. Axiom® may be applied once per use season 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.

WEED SPECIES CONTROLLED BY AXIOM® DF HERBICIDE

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

WEEDS CONTROLLED ¹	
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 sp.</i>)
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 spp.</i>)	Spurge, spotted (<i>Euphorbia maculata</i>)
¹ 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 ounces will provide only early season weed control on all other soil textures. To complement early season weed control, Axiom® is recommended for use in tank-mixture with 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 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>)	Signalgrass, broadleaf (<i>Brachiaria platyphylla</i>)
Panicum, browntop (<i>Panicum fasciculatum</i>)	Shattercane (<i>Sorghum bicolor</i>)
Sandbur, field (<i>Cenchrus incertus</i>)	Witchgrass (<i>Panicum capillare</i>)
ANNUAL BROADLEAF WEEDS	
Beggarweed, Florida (<i>Desmodium tortuosum</i>)	Ragweed, common (<i>Ambrosia artemisiifolia</i>)
Jimsonweed (<i>Datura stramonium</i>)	Sida, prickly (<i>Sida spinosa</i>)
Lambsquarters, common (<i>Chenopodium album</i>)	Smartweed, Pennsylvania (<i>Polygonum pennsylvanicum</i>)
Mustard spp. (<i>Brassica spp.</i>)	Waterhemp, common (<i>Amaranthus rudis</i>)
Pigweed spp. (<i>Amaranthus spp.</i>)	Waterhemp, tall (<i>Amaranthus tuberculatus</i>)

AXIOM® DF HERBICIDE USE RATES

The recommended use rate for Axiom® applied alone, in tank- mix combination with and/or sequentially with other herbicides for all application methods and timings is **7 to 13 ounces** per acre. The 13 ounce rate of Axiom® 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 ounces will provide only early season weed control on all soil textures. To complement this early season weed control, Axiom® 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® may be tank mixed with certain recommended herbicides. Mixtures may be used in either conventional, conservation, minimum and no-tillage systems. They may be applied with similar timings and methods as Axiom® 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 recommended use rates, precautions and/or restrictions. Herbicides recommended for tank mixtures with Axiom® include:

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

AXIOM® DF HERBICIDE SEQUENTIAL APPLICATIONS

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

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

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

WINTER WHEAT

Axiom Herbicide is recommended for control of certain annual grass and broadleaf weeds when applied early postemergence in winter wheat. Axiom may be applied either alone, in tankmix combination with and/or sequentially with other registered herbicides.

SPECIAL PRECAUTIONS AND RESTRICTIONS

1. Apply by ground application only.
2. Certain winter wheat varieties are sensitive to Axiom. Use of Axiom is not recommended on the following sensitive winter wheat varieties: AgriPro Clemens, AgriPro Foster, AgriPro Mallard, AgriPro Mitchell, Arise 766, Arise W33, AT 90W, AT 91W, Arapaho, Baker Seed 33, Beck 101, Beck 102, Beck 108, Brodbeck Celebrity, Brodbeck Stealth, Brodbeck Viper, Century, Cimarron, Coker 833, Coker 916, Coker 983, Coker 9024, Coker 9105, Coker 9323, Coker 9474, Coker 9663, Coker 9835, Coker 9704, Coker 9766, Coker 9835, Coker 9877, CountryMark 522W, CountryMark 558W, Delta Grow 3300, Delta King 7777, Delta King 9121, EK 102, Erwin Keith 102, Erwin Keith 114, Exsegen Rebekah, FFR 552, FFR 535, FFR 555, FFR 558, Florida 304, Freedom, FS 417, FS 423, FS 425, FS 430, GA Dozier, GA Fleming, GA Roberts, GA Stuckey, Gateway Daybreak, Glory, Gore, Hazen, HBK 9650W, Hickory, Jackson, Jay Pee, Julie III, KAS Hamilton, KAS Independence, KY-49-25, Linden, Madison, Mesa, MO Sisson, Mustang, MWS Seeds 30, NE Arapahoe, NE Wahoo, OH Honey, Pacer, Patriot, Patriot 911, Patriot 942, Patriot 948, PI XW 522, PI 2551, PI 2163, Pioneer 2643, Pioneer 2691, Princeton 733, Progeny 156, PSR W71, PSR 226, PSR 278, Rosen, Rupp Seed RS .931, Savannah, Schlessman GR 1620, Seed Consultants 1358, Sierra, Southern States 522, Southern States 535, Southern States 550, Southern States 560, Steyer Seeds Podach, TAM 107, Terra SR204, TR 101, TR 211, TR 1011, TR 8822, TR TV 8825, TR TV 8450, TR TV 8557, TR TV 8565, Triumph 64, Vona, Vigoro RC901, USG 3209, TSG 3709, University of Arkansas Sabbe, Wakefield, Wings, Winridge, Yamhill.
 Not all available winter wheat varieties and hybrids may have been tested for tolerance. If a variety or hybrid is not listed (especially newly released varieties), treat only a small area until tolerance is established before treating large acreages.
3. Weed control may be reduced if excessive straw from the previous crop is present at AXIOM application.
4. Do not apply more than 10 ounces of AXIOM per acre per use season.
5. Do not apply in tank mixtures with crop oil concentrates (COC), vegetable and/or petroleum oils as crop injury may result.
6. Do not graze winter wheat within 30 days of AXIOM application.
7. Do not apply this product by air.

WEED SPECIES CONTROLLED BY AXIOM

AXIOM herbicide applied early postemergence at recommended rates will control many important annual grass and broadleaf weeds:

POSTEMERGENCE BURNDOWN WEED CONTROL BY AXIOM	
ANNUAL GRASSES	ANNUAL BROADLEAF WEEDS
Bluegrass, annual (<i>Poa annua</i>)	Chickweed, mouseear (<i>Cerastium vulgatum</i>)
Brome, soft (<i>Bromus mollis</i>)	Falseflax, smallseed (<i>Camelina microcarpa</i>)
Bromegrass, California (<i>Bromus carinatus</i>)	Fiddleneck, coast (<i>Amsinckia intermedia</i>)
Canarygrass, hood (<i>Phalaris paradoxa</i>)	Fiddleneck, tarweed (<i>Amsinckia lycopsoides</i>)
Fescue, rattail (<i>Vulpia myuros</i>)	Henbit (<i>Lamium amplexicaule</i>)
	Mustard, blue (<i>Chorispora tenella</i>)
	Radish, wild (<i>Raphanus raphanistrum</i>)

WEED SPECIES SUPPRESSED BY AXIOM

AXIOM herbicide applied early postemergence at recommended rates will suppress many important annual grass and broadleaf weeds:

POSTEMERGENCE BURNDOWN WEED SUPPRESSION BY AXIOM	
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>) Crabgrass, Large (<i>Digitaria sanguinalis</i>) Foxtail, spp. (<i>Setaria spp.</i>) Oats, wild (<i>Avena fatua</i>) Ryegrass, annual (<i>Lolium multiflorum</i>) Windgrass (<i>Apera spica-venti</i>)	Chickweed, common (<i>Stellaria media</i>) Lambsquarters, common (<i>Chenopodium album</i>) Mustard, tumble (<i>Sisymbrium altissimum</i>) Pigweed spp. (<i>Amaranthus spp.</i>) Shepherdspurse (<i>Capsella bursa-pastoris</i>)
Weed suppression indicates that weed control may vary from poor to excellent depending on soil characteristics, stage of growth at application and environmental conditions at and following application. For maximum control, apply at the highest recommended rate. Weed suppression appears as a reduction in weed size and growth as compared to a non-treated area in the same field.	

AXIOM USE RATES

Recommended AXIOM use rates and application timings are listed in the following table:

AXIOM IN WINTER WHEAT		
AXIOM DF Broadcast Rates Per Acre		APPLICATION TIMINGS AND REMARKS
Soil Texture	Rate (Ounces per acre)	Apply specified rate per acre as a uniform broadcast spray using 5 or more gallons of spray carrier per acre as a ground application. Recommended application timings are from spike to the 3 leaf growth stage of winter wheat (Early Postemergence). For best control of weeds, 1) plant wheat after the first flush of weeds has emerged and was destroyed by tillage or in no-till winter wheat, apply a nonselective herbicide to control emerged weeds at or prior to planting 2) make AXIOM applications prior to the 1-leaf stage of the weeds and 3) use the highest recommended rate.
Coarse	4 – 6	
Medium / Fine	6 – 10	

AXIOM and SENCOR IN WINTER WHEAT

AXIOM contains metribuzin which is the active ingredient in SENCOR. AXIOM may be tank-mixed with SENCOR but do not exceed a total of more than the equivalent amount of metribuzin active ingredient recommended on the SENCOR label for the soil type and crop stage at application.

For sequential applications of AXIOM and SENCOR, do not exceed a total of 0.5 pounds active ingredient (or the equivalent of 10 2/3 oz SENCOR 75 DF product) per acre per year of metribuzin. Allow a minimum of 21 days between sequential applications of AXIOM 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 factor.

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

AXIOM USE IN TANK MIXTURES AND/OR SEQUENTIAL APPLICATIONS

If a broader spectrum of weed control is desired, AXIOM may be tank mixed with and/or applied sequentially with any other herbicides which are registered for use in winter wheat unless specifically prohibited by the label of the tank mix or sequentially-applied product. Three-way or multiple tank mixtures are permitted unless restricted by the product label. Use of crop oil concentrates, vegetable oils and/or petroleum oils are not recommended as crop injury may occur. Refer to the individual product labels for recommended use rates, precautions and/or restrictions. Always follow the most restrictive label.

AXIOM® DF HERBICIDE SEQUENTIAL APPLICATION:	
SEQUENTIAL APPLICATION (Labeled Use Rate)	ADDITIONAL WEEDS CONTROLLED
Osprey™ Herbicide (3.2 – 4.75 oz/A)	Annual/Italian ryegrass, wild oats, blackgrass, roughstalk bluegrass, littleseed canarygrass, Persian darnel, wild mustard, volunteer canola
Postemergence application only. Requires an adjuvant as specified in the product label Applications should be made to actively growing weeds Do not make more than one application in one winter wheat growing season Do not apply more than 4.75 oz per acre in one winter wheat growing season	

CORN, SOYBEAN AND WINTER WHEAT CROP ROTATION RECOMMENDATIONS

Waiting period after an AXIOM application for planting of the following crops in rotation. In the event of a crop failure after application of Axiom®, only the following crops can be planted, after the waiting period as listed below. Do not make a second application of Axiom®.

Immediately			
Corn	Soybean	Wheat ¹	Triticale ¹
1 month			
Potato			
4 months			
Carrot	Wheat ²	Triticale ²	
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	Sugar beets	Other root crops not listed	

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

² Where any other labeled rate of AXIOM >10 oz/A has been applied.

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 teaspoons/pound/acre use rate and for liquids add 1/2 teaspoon/pint/acre 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 teaspoon is equal to a use rate of 2 pints/100 gallons 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.

APPENDIX II

IMPREGNATION AND APPLICATION ON DRY FERTILIZER

Dry bulk fertilizer may be impregnated or coated with Axiom® DF Herbicide for applications to corn and soybeans. Follow all Axiom® label recommendations, special instructions and precautions. All state regulations relating to dry bulk fertilizer blending, impregnating and labeling must also be followed.

Rates: Select the recommended Axiom® use rate per acre from the crop section of this label and determine the quantity of dry bulk fertilizer to be applied per acre (use a minimum of 200 pounds and a maximum of 450 pounds per acre). Use the equation below to determine the amount of Axiom® needed per ton of fertilizer applied.

$$\frac{\text{Oz Axiom® per acre} \times 2000}{\text{Lb fertilizer per acre}} = \frac{\text{Oz Axiom®}}{\text{Per ton fertilizer}}$$

(1 lb = 16 ounces Axiom®)

Impregnation: Axiom® may be impregnated on many commonly used dry fertilizers but should not be impregnated on ammonium nitrate, fertilizers containing ammonium nitrate, potassium nitrate, sodium nitrate or powder limestone.

To impregnate Axiom® on bulk fertilizer, use a closed rotary-drum mixer or other commonly used dry bulk fertilizer blender equipped with suitable spray equipment. Mix Axiom® with sufficient water to form a sprayable slurry mixture. Spray nozzles must be directed to provide uniform fertilizer coverage while avoiding spray contact with mixing equipment. Nonuniform impregnation can cause crop injury or unsatisfactory performance.

Spray the herbicide mixture onto the fertilizer after blending has started. If necessary, include a suitable drying agent to ensure a spreadable herbicide impregnated fertilizer. If the fertilizer materials are excessively dusty, use diesel fuel or other suitable additive to reduce dust prior to impregnation. Apply the treated fertilizer immediately after impregnation to avoid lump formation and spreading difficulties.

Application: Accurate calibration of fertilizer application equipment and uniform fertilizer distribution is essential for satisfactory weed control. Air flow or auger metered application equipment is preferred (one pass application). If other equipment is used, the recommended application method is to apply one-half the recommended rate and overlap 50 percent or to double apply by splitting the middles to obtain the best distribution pattern.

40/40

IMPORTANT: READ BEFORE USE

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 should 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. All such risks shall be assumed by the user or buyer.

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NET WEIGHT: 25 POUNDS

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