100-1389 8/26/2013 1/26

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

Ms. Tamara Murphy
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, NC 27419

AUG 26 2013

Subject: Label amendment to remove safener restrictions
Product Name: Axial Star Herbicide
EPA Reg. No: 100-1389
Decision Number: 472067

Dear Ms. Murphy:

The labeling referred to above, submitted in connection with registration in accordance with FIFRA section 3(C)(5), as amended, is acceptable, provided that you submit and/or cite all data required for reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

A stamped copy of your label is enclosed for your records. This label supersedes all previously accepted labels. You must submit one (1) copy of the final printed label before you release the product for shipment. Products released for shipment after eighteen (18) months from the date of this letter must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions. If you have questions or concerns regarding this letter, please contact Beth Benbow at (703) 347-8072 or email at benbow.bethany@epa.gov.

Sincerely,

Kathryn V. Montague

Kathryn V. Montague
Product Manager 23
Herbicide Branch
Registration Division (7505P)

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GROUP 1 | 4 HERBICIDES

Axial® Star Herbicide

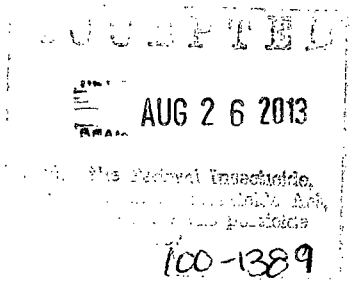
Postemergence herbicide for control of annual grass and broadleaf weeds in wheat and barley.

Active Ingredient:	
Pinoxaden*:	4.9%
Fluroxypyr 1-methylheptyl ester**:	12.4%
Other Ingredients:	82.7%
Total:	**100.0%**

*CAS No. 243973-20-8
**CAS No. 81406-37-3

Contains 0.42 pounds of pinoxaden and 0.73 pounds of fluroxypyr acid equivalent per gallon.

Contains petroleum distillates.



KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1389

EPA Est. 100-NE-001

SCP 1389A

2.5 gallons
____ gallons
Net Contents

FIRST AID	
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If swallowed	• Immediately call a poison control center or doctor. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give **any** liquid to the person. • Do not give anything by mouth to an unconscious person.
If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
NOTE TO PHYSICIAN May pose an aspirational pneumonia hazard. Contains petroleum distillates.	
HOTLINE NUMBER For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call **1-800-888-8372**	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Contains petroleum distillate. Avoid contact with skin or clothing. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Wear long-sleeved shirt and long pants, socks, shoes, and gloves. Avoid contact with eyes or clothing. Wear protective eyewear. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

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Personal Protective Equipment (PPE)

Some materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for Category C, F or G on an EPA chemical resistant category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils
- Protective eyewear

User Safety Requirements

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

Engineering Control Statements

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 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

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

Environmental Hazards

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

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Physical or Chemical Hazards

Do not use or store near heat or open flame.

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CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

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

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

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DIRECTIONS FOR USE

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

Axial Star Herbicide may be used only in accordance with directions on this label or in separately published Syngenta supplemental labeling directions for this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal 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 48 hours.

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
- Shoes plus socks
- Chemical-resistant gloves such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils

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

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PRODUCT INFORMATION

Axial Star Herbicide is a postemergence systemic herbicide for the control of annual grasses and broadleaf weeds in all varieties of spring wheat (excluding durum), winter wheat, and barley not underseeded with legumes.

Axial Star Herbicide is absorbed by foliage and is rapidly translocated to the growing points of leaves and stems of target weeds with growth stopping within days of application. Susceptible grass weeds turn chlorotic (yellowing) within one to three weeks and are completely controlled within three to five weeks. Susceptible broadleaf weeds exhibit twisting and curling of stems (epinasty) and leaf cupping followed by growth inhibition and eventual plant death within weeks. Level and rate of control depend on weed species, growing conditions, crop competition, and coverage. Thorough spray coverage of target weeds is essential for consistent control.

Rainfastness

Axial Star Herbicide is not affected by rain falling 1 hour or more after application.

Management of Resistant Weeds

Axial Star Herbicide contains a Group 1 (ACCase inhibitor) herbicide and Group 4 (synthetic auxin) herbicide. Some naturally occurring weed populations have been identified as resistant to Group 1 and 4 herbicides. Selection of resistant biotypes, through repeated use of these herbicides in the same field, may result in control failures. A resistant biotype may be present if poor performance cannot be attributed to adverse weather conditions or improper application methods. If resistance is suspected, contact your local Syngenta representative for assistance.

The following practices will delay selection for resistant populations of weeds:

- Apply postemergence herbicides to small, actively growing weeds.
- Ensure that good spray coverage is achieved with proper spray volumes and calibrated equipment.
- Use the full label rate of product.
- Avoid tank mixes that may cause antagonism and reduced weed control.
- Where possible, avoid the repeated use of herbicides with the same mode of action (i.e., same group number) in successive seasons either in cereal crops or rotational crops.
- Use a diverse crop/fallow rotation to extend the range of available herbicides and agronomic practices.
- Use cultivation, fertilizer regimens, seeding rates and row widths that enhance crop competitiveness.
- Prevent weed escapes from producing seed either in the crop or during fallow periods.

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Rotational Crop Restrictions

The following crops may be planted at the specified interval following application of Axial Star Herbicide.

Crop	Rotation Interval (Months)
Barley, wheat	0
All other crops	4

APPLICATION PROCEDURES

Timing of Application

Apply Axial Star Herbicide to all varieties of spring wheat (excluding durum), winter wheat, and barley from the 2-leaf stage to pre-boot stage. Refer to the **Crop Use Directions** section for grazing and harvest restrictions.

Do not apply to a crop that is stressed by conditions such as frost, low fertility, drought, flooding, disease damage, or insect damage as crop injury may result.

For optimum results, apply Axial Star Herbicide to actively growing weeds. An early application will maximize crop yields by reducing weed competition. Weed control following application of Axial Star Herbicide alone or in combination with other herbicides can be reduced or delayed under conditions of stress, such as drought, heat, insufficient fertility, flooding, and prolonged cool temperatures. Optimum weed control will be obtained if application of Axial Star Herbicide is delayed until the conditions of stress have ended and weeds are once again actively growing. Weeds emerging after Axial Star Herbicide application will not be controlled.

USE RATE

Apply Axial Star Herbicide at 16.4 fl. oz./A in a minimum of 8 gallons up to 10 gallons of water per acre.

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WEEDS CONTROLLED

Weeds Controlled by Axial Star Herbicide at 16.4 fl. oz/A.

Grass Weeds Controlled	Weed Size or Growth Stage for Optimum Control
Barnyardgrass (*Echinochloa crus-galli*)	1 to 5-leaf on the main stem, prior to emergence of the 3rd tiller
Canarygrass (*Phalaris* spp.)	1 to 5-leaf on the main stem, prior to emergence of the 3rd tiller
Darnel, Persian (*Lolium persicum*)	1 to 6-leaf on the main stem, prior to emergence of the 4th tiller
Foxtail, Giant (*Setaria faberi*)	1 to 5-leaf on the main stem, prior to emergence of the 3rd tiller
Foxtail, Green (*Setaria viridis*)	1 to 5-leaf on the main stem, prior to emergence of the 3rd tiller
Foxtail, Yellow (*Setaria pumila*)	1 to 5-leaf on the main stem, prior to emergence of the 3rd tiller
Oat, Volunteer (*Avena sativa*)	1 to 6-leaf on the main stem, prior to emergence of the 4th tiller
Oat, Wild (*Avena fatua*)	1 to 6-leaf on the main stem, prior to emergence of the 4th tiller
Proso Millet, Wild (*Panicum miliaceum)*	1 to 5-leaf on the main stem, prior to emergence of the 3rd tiller
Ryegrass, Italian (Annual) (*Lolium multiflorum)*	1 to 5-leaf on the main stem, prior to emergence of the 3rd tiller
Windgrass (*Apera* spp.)	1 to 5-leaf on the main stem, prior to emergence of the 3rd tiller

Broadleaf Weeds Controlled	Weed Size or Growth Stage for Optimum Control
Bedstraw, Catchweed (*Galium aparine*)	Less than 4 inches tall
Cocklebur, Common (*Xanthium strumarium*)	Less than 4 inches tall
Flax, Volunteer (*Linum usitatissimum*)	Less than 4 inches tall
Kochia (*Kochia scoparia*)	Less than 4 inches tall
Lettuce, Prickly (*Lactuca serriola*)	1 to 4-leaf stage
Ragweed, Common (*Ambrosia artemisiifolia*)	Less than 4 inches tall
Sunflower, Common (*Helianthus annuus*)	1 to 4-leaf stage

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BROADLEAF HERBICIDE TANK-MIX RECOMMENDATIONS

Axial Star Herbicide may be tank mixed with the broadleaf herbicides listed below to broaden the weed control spectrum. Refer to the label of the tank-mix partner for registered crops, additional weeds controlled, and directions for use. Observe all precautions and restrictions on the labels of products used in tank mixtures. Use in accordance with the most restrictive of label limitations and precautions. This product cannot be mixed with any other product whose label prohibits such a mixture.

Under less than favorable environmental conditions, grass antagonism (i.e., reduced grass control) may occur with certain broadleaf herbicide tank mixes.

Precaution: The many formulations of tank-mix partners have varying mixing characteristics. Before Axial Star Herbicide is used in tank mixture with other products, the mixture should first be tested in small containers for physical compatibility. For directions on how to conduct a compatibility test, refer to the **Tank-Mix Compatibility Test** section.

Broadleaf Herbicide Tank-Mix Partners

Table 1: For control of wild oat, volunteer oat, green foxtail, yellow foxtail, Italian (annual) ryegrass, and additional broadleaf weeds (refer to the broadleaf tank-mix partner label for weeds controlled), use Axial Star Herbicide at 16.4 fl. oz./A plus one of the following single or two-way broadleaf herbicide combinations. Broadleaf herbicide combinations other than those listed in the table below are not recommended.

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SELECT ONLY ONE BROADLEAF HERBICIDE TANK-MIX COMBINATION LISTED IN THE TABLE BELOW

Broadleaf Herbicide[A]	Rate	Grass Weeds Controlled by Axial Star Herbicide at 16.4 fl. oz./A in Combination With Listed Mixture Partners*				
		Wild Oat	Volunteer Oat	Green Foxtail	Yellow Foxtail	Italian Ryegrass
Affinity® BroadSpec[B]	0.4 oz./A	C	C	S	C	C
Affinity® TankMix[B]	0.6 oz./A	C	C	S	C	C
Ally® XP[B]	0.1 oz./A	C	C	-	-	C
Amber®[B]	0.28-0.47 oz./A	C	C	-	-	C
Amber[B] + MCPA ester[C]	0.28-0.47 oz./A + 0.5-0.75 pt./A	C	C	-	-	C
Bronate Advanced™	0.6-0.8 pt./A	C	C	C	C	C
Buctril®	0.75-1.25 pt./A	C	C	C	C	C
Curtail® M	1.75 pt./A	C	C	C	-	-
Express® XP[B]	0.25-0.33 oz./A	C	C	S	S	C
Finesse®[B]	0.2-0.4 oz./A	C	C	-	-	C
Harmony® Extra XP[B]	0.3-0.6 oz./A	C	C	C	C	C
Harmony® SG[B]	0.45-0.9 oz./A	C	C	C	C	C
Huskie™[B]	11 fl. oz./A	C	C	C	C	C
MCPA Ester[C]	0.5-0.75 pt./A	C	C	C	C	C
Orion®[B]	17 fl. oz./A	C	C	C	C	C
Peak®[B]	0.25-0.5 oz./A	C	C	-	-	C
Peak[B] + MCPA Ester[C]	0.25-0.5 oz./A + 0.5-0.75 pt./A	C	C	-	-	C
Pulsar™	8.3 fl. oz./A	C	C	C	C	C
Pulsar + MCPA ester[C]	8.3 fl. oz./A + 8.6 fl. oz/A	C	C	C	C	C

*C = Control; S = Suppression (indicates "Partial Control" which means significant activity but not always at a level generally considered acceptable for commercial weed control).

[A]Other products that contain equivalent active ingredient(s) and used at the same active ingredient rate(s) as the broadleaf herbicide tank-mix partner listed in this table may be used.

[B]Addition of surfactants is not required.

[C]Assume 3.7 lb. ae/gal. product.

TANK MIXES WITH FUNGICIDES, INSECTICIDES AND LIQUID NITROGEN FERTILIZER

Tank-Mix Application with Tilt® Fungicide

Axial Star Herbicide may be tank mixed with Tilt Fungicide for annual grass and broadleaf weed control and early season disease suppression. Apply Axial Star Herbicide at 16.4 fl. oz./A in a tank mix with Tilt Fungicide at labeled use rates. Refer to the Tilt Fungicide label for specific use directions, application rates, restrictions, and a list of diseases suppressed and/or controlled.

Tank-Mix Application with Quilt® Fungicide

Axial Star Herbicide may be tank mixed with Quilt Fungicide for annual grass and broadleaf weed control and early season disease suppression. Apply Axial Star Herbicide at 16.4 fl. oz./A in a tank mix with Quilt Fungicide at 7 fl. oz./A. Refer to the Quilt Fungicide label for specific use directions, restrictions, and a list of diseases suppressed and/or controlled. **Note:** Under certain environmental conditions, tank mixes of Quilt Fungicide plus herbicides may cause crop injury.

Tank-Mix Application with Warrior II with Zeon Technology®

Axial Star Herbicide may be tank mixed with Warrior II with Zeon Technology for annual grass and broadleaf weed control and insect control. Apply Axial Star Herbicide at 16.4 fl. oz./A in a tank mix with Warrior II with Zeon Technology at labeled use rates. Refer to the Warrior II with Zeon Technology label for specific use directions, application rates, restrictions, and a list of insects controlled.

Mixtures with Liquid Nitrogen Fertilizers

Axial Star Herbicide may be mixed in a spray solution containing up to 50% liquid nitrogen fertilizer. Add Axial Star Herbicide to the water first. Mix thoroughly and then add the liquid nitrogen fertilizer in an amount no greater than 50% of the final volume. **Note:** Under certain environmental conditions, mixtures of liquid nitrogen fertilizers as a partial carrier may cause crop burn.

When using Axial Star Herbicide with approved herbicide tank-mix partners, consult the label of the partner product and follow any additional instructions or restrictions on that label which relate to mixture with liquid nitrogen fertilizers.

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GROUND AND AERIAL APPLICATION PROCEDURES

For best accuracy, calibrate the sprayer before use.

Ground Applications

Water Volume - Use an application volume of 8 to 10 gallons of water per acre. Use 10 gallons of water per acre under dry conditions or dense weed populations. Application rates of greater than 10 gallons of water per acre should be avoided as reduced weed control may occur.

Spray Nozzles - 80° or 110° flat fan nozzles are recommended for optimum spray coverage. Nozzles must be uniformly spaced along the boom to provide accurate and uniform coverage. Point the nozzles forward in the direction of travel at an angle of 45° for optimum coverage of weeds. Follow the nozzle manufacturer's recommendations for pressure and screens. Do not use flood or hollow cone type nozzles.

Screens - Use a screen or strainer with 16-mesh or coarser on the suction side of the pump. Do not place a screen in the recirculation line unless using a roller or piston pump. Use 50-mesh or coarser screens between the pump and boom and at the nozzles.

Pressure - 35-40 psi at the nozzles. Lower pressure may be used with extended range or low pressure nozzles.

Pump - Must have capacity to maintain pressure (35-40 psi) and to maintain the product suspension through tank agitation. A centrifugal pump is recommended with an agitation rate of 20 gals./minute/100 gals. tank size. Agitation must be maintained during mixing and spraying.

Good weed coverage with the spray mixture is essential for optimum weed control results. Observe sprayer nozzles frequently during the spraying operation to ensure that the spray pattern is uniform. Avoid large spray overlaps which result in excessive rates in the overlap areas. Also, avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur. To reduce spray drift, do not apply under windy conditions. Allow adequate distance between target area and desirable vegetation to prevent drift to nontarget areas. Boom height for broadcast over-the-top application should be based upon the free-standing height of the crop, not height above the soil surface, and should be at least 12 inches above the crop.

Aerial Applications

Apply Axial Star Herbicide in water using a minimum spray volume of 5 gals./A. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. Make applications at a maximum height of 10 ft. above the crop with low-drift nozzles at a maximum pressure of 40 psi and wind speed not exceeding 10 mph to help assure accurate application within the target area.

Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator and grower must consider the interaction of equipment and related factors to ensure that the potential for drift to sensitive non-target plants is minimal.

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

1. The distance of the outermost nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.

2. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees.

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

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory Information**.

Aerial Drift Reduction Advisory Information

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **Wind, Temperature and Humidity,** and **Temperature Inversions**).

Controlling Droplet Size

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.

- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length

For some use patterns, reducing the effective boom length to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height

Applications should not be made at a height greater than 10 ft. above the top of the largest plants, unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

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

Sensitive Areas

This pesticide may only be applied when the potential for drift to adjacent sensitive areas, e.g., residential areas, bodies of water, non-target plants is minimal, (i.e., when the wind is blowing away from the sensitive area.)

Avoid all direct or indirect contact (such as spray drift) of Axial Star Herbicide with crops other than those specified for treatment on this label since injury may occur.

Chemigation

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

MIXING PROCEDURES

Prior to using Axial Star Herbicide, ensure that the spray tank, lines, screens and filters are thoroughly clean.

Mixing Instructions

1. Half fill spray tank with clean water. Start agitation or bypass system.
2. If a broadleaf herbicide mix partner is to be used, add the product **FIRST** prior to adding Axial Star Herbicide and agitate for 2-3 minutes.
3. Add correct amount of Axial Star Herbicide.
4. Agitate for 2-3 minutes before adding remainder of water and then maintain constant agitation.
5. After any break in spraying operations, agitate thoroughly before spraying again.
6. **Use the spray solution as soon as it is prepared.**

Tank-Mix Compatibility Test

A jar test is recommended prior to tank mixing to ensure compatibility of Axial Star Herbicide with mixture partners. Add proportion amounts of tank mixture components in a clear quart jar one at a time in the recommended mixing order. Gently shake or invert capped jar and let stand for 15-30 minutes. If the mixture clumps, forms flakes, oily films or layers or other precipitates, it is not compatible and the tank mixture should not be used.

CLEANOUT PROCEDURES FOR SPRAY EQUIPMENT

Thoroughly clean application equipment immediately after spraying Axial Star Herbicide. Ensure that all traces of the product are removed. The following directions are provided:

1. Drain any remaining spray mixture from the application equipment.
2. Hose down the interior surfaces of the tank. Flush tank, hoses, boom and nozzles with clean water for 10 minutes. Fill the tank with water and recirculate for 15 minutes. Spray the mixture through hoses, booms and nozzles and drain tank. Ensure that the area at the end of the spray boom beyond the last nozzle is flushed with water.
3. Remove all spray nozzles and screens and clean separately.
4. If spray equipment will be used for pesticide application to crops sensitive to Axial Star Herbicide, steps 1-2 should be repeated.
5. Exterior surfaces of spray equipment should also be thoroughly cleaned.

Note: Rinsate may be disposed of onsite according to label use directions or at an approved waste disposal facility.

CROP USE DIRECTIONS

Wheat and Barley

Axial Star Herbicide can be used on all varieties of spring wheat (excluding durum), winter wheat, and barley. Do not allow spray to drift to adjacent fields seeded to crops other than wheat or barley. Do not treat wheat or barley underseeded with legumes.

To avoid possible illegal residues:

- Make only one application per crop season.
- Do not graze livestock or harvest forage for hay from treated wheat and barley for a minimum of 30 days following application.
- Do not harvest grain for 60 days following application.
- Do not feed treated wheat or barley straw to livestock for a minimum of 60 days following application.

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a cool, dry, secure place. Do not store near seeds, fertilizers, or foodstuffs.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of excess pesticides, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Handling [less than 5 gallons]

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

Container Handling [Bulk and Mini-bulk]

Refillable container. Refill this container with Axial Star Herbicide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities. If the container is damaged or leaking, or obsolete, contact SYNGENTA CROP PROTECTION, LLC at 1-800-888-8372.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

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

Formulated with STARANE® Herbicide from Dow AgroSciences LLC.

Bronate Advanced™, Buctril®, Bronate®, and Huskie™ trademarks of Bayer CropScience

Curtail® M trademark of Dow AgroSciences, LLC

For non-emergency (e.g., current product information), call
Syngenta Crop Protection at 1-800-334-9481

Manufactured for:
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 1389A-L1A 0112 [Product ID 44815 - 2.5 gallons]
SCP 1389A-L2A 0112 [Product ID 44814 - Bulk]

[BASE LABEL]

GROUP 1 4 HERBICIDES

Axial® Star Herbicide

Postemergence herbicide for control of annual grass and broadleaf weeds in wheat and barley.

Active Ingredient:	
Pinoxaden*:	4.9%
Fluroxypyr 1-methylheptyl ester**:	12.4%
Other Ingredients:	82.7%
Total:	100.0%

*CAS No. 243973-20-8
**CAS No. 81406-37-3

Contains 0.42 pounds of pinoxaden and 0.73 pounds of fluroxypyr acid equivalent per gallon.

Contains petroleum distillates.

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1389

EPA Est. 100-NE-001

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Manufactured for:
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 1389A

2.5 gallons
Net Contents

KEEP OUT OF REACH OF CHILDREN.

CAUTION

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Contains petroleum distillate. Avoid contact with skin or clothing. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Wear long-sleeved shirt and long pants, socks, shoes, and gloves. Avoid contact with eyes or clothing. Wear protective eyewear. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

FIRST AID

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

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If swallowed: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

NOTE TO PHYSICIAN: May pose an aspirational pneumonia hazard. Contains petroleum distillates.

HOTLINE NUMBER: For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call **1-800-888-8372.**

Environmental Hazards: For terrestrial uses: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsate.

Physical or Chemical Hazards: Do not use or store near heat or open flame.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry, secure place. Do not store near seeds, fertilizers, or foodstuffs.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticides, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

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

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

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

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SUPPLEMENTAL LABELING

Syngenta Crop Protection, LLC
P. O. Box 18300
Greensboro, North Carolina 27419-8300
SCP 1389A-S1 0112

GROUP 1 4 HERBICIDES

Axial® Star Herbicide

Postemergence herbicide for control of annual grass and broadleaf weeds in wheat and barley.

This supplemental label expires on August 31, 2016 and must not be used or distributed after this date.

Active Ingredient:	
Pinoxaden*:	4.9%
Fluroxypyr 1-methylheptyl ester**:	12.4%
Other Ingredients:	82.7%
Total:	**100.0%**

*CAS No. 243973-20-8
**CAS No. 81406-37-3

Contains 0.42 pounds of pinoxaden and 0.73 pounds of fluroxypyr acid equivalent per gallon.

Contains petroleum distillates.

KEEP OUT OF REACH OF CHILDREN.

AUG 2 6 2013

CAUTION

EPA Reg. 100-1389

100-1389

All applicable directions, restrictions and precautions on the EPA-registered label are to be followed. Before using Axial Star Herbicide as permitted according to this supplemental labeling, read and follow all applicable directions, restrictions, and precautions on the EPA registered label on or attached to the pesticide product container. This Supplemental Labeling contains revised use instructions and or restrictions that may be different from those that appear on the container label. This Supplemental Labeling must be in the possession of the user at the time of pesticide application. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

syngenta

CROP USE DIRECTIONS

Wheat and Barley

Axial Star Herbicide can be used on all varieties of spring wheat (excluding durum), winter wheat, and barley. Do not allow spray to drift to adjacent fields seeded to crops other than wheat or barley. Do not treat wheat or barley underseeded with legumes.

To avoid possible illegal residues:

- Make only one application per crop season.
- Do not graze livestock or harvest forage for hay from treated wheat and barley for a minimum of 30 days following application.
- Do not harvest grain for 60 days following application.
- Do not feed treated wheat or barley straw to livestock for a minimum of 60 days following application.

AXIAL STAR 1389A-S1 0112-B – bb – 8-21-13