

100-1130

9/8/2010

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

SEP - 8 2010

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Syngenta Crop Protection, Inc.  
Pat Dinnen  
P.O. Box 18300  
Greensboro, NC 27419-8300

Subject: Achieve SC Herbicide  
EPA Reg. No. 100-1130  
Revision to Container Disposal Instructions per PRN 2007-4

Dear Ms. Dinnen,

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for Achieve SC Herbicide (EPA Reg. No. 100-1130) dated August 16, 2010. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, please call me directly at 703 305 5697.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Tompkins", written over a circular stamp.

Jim Tompkins, Product Manager 25  
Herbicide Branch  
Registration Division (7505P)  
Office of Pesticide Programs

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United States  
 Environmental Protection Agency  
 Washington, DC 20460

<input type="checkbox"/>	Registration
<input type="checkbox"/>	Amendment
<input checked="" type="checkbox"/>	Other

OPP Identifier Number
Notification

**Application for Pesticide - Section I**

1. Company/Product Number 100-1130	2. EPA Product Manager Jim Tompkins	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Achieve SC Herbicide	PM# 25	
5. Name and Address of Applicant (Include ZIP Code) Syngenta Crop Protection, Inc. P. O. Box 18300 Greensboro, NC 27419  <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:  EPA Reg. No. _____ Product Name _____	

**Section - II**

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

**Explanation:** Use additional page(s) if necessary. (For Section I and Section II.).

Notification of label change per PR Notice 2007-4. This Notification is consistent with the guidance of PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR §§156.10, 156.140, 156.144 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if the amended label is not consistent with the requirements of 40 CFR §§156.10, 156.140, 156.144, 156.146, and 156.156, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Syngenta is amending the Storage and Disposal section of the label by Notification according to the directions stated in PR Notice 2007-4.

**Section - III**

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____		
*Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per Container	If "Yes" Unit Packaging wgt.	No. per container
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container	4. Size(s) Retail Container 2.16 gal.	5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product			
6. Manner in Which Label is Affixed to Product		<input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled	<input checked="" type="checkbox"/> Other <u>Pressure Sensitive</u>		

**Section - IV**

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)					
Name Pat Dinnen	Title Label Group Leader	Telephone No. (Include Area Code) 336-632-2494			
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.					6. Date Application Received (Stamped)
2. Signature <i>Pat Dinnen</i>		3. Title Regulatory Specialist			
4. Typed Name Pat Dinnen		5. Date August 16, 2010			

Syngenta Crop Protection, Inc.  
P.O. Box 18300  
Greensboro, NC 27419-8300  
www.syngenta.com



**FedEx**

August 16, 2010

Document Processing Desk (NOTIF)  
Office of Pesticide Programs (7504P)  
U.S. Environmental Protection Agency  
Room S-4900, One Potomac Yard  
2777 South Crystal Drive  
Arlington, VA 22202-4501

Attention: Ms. Linda Arrington

**SUBJECT: ACHIEVE® SC HERBICIDE  
EPA REG. NO. 100-1130  
NOTIFICATION OF LABEL CHANGE PER PR NOTICE 2007-4**

Syngenta Crop Protection, Inc. is submitting Notification for Achieve SC Herbicide, EPA Reg. No. 100-1130. Syngenta is amending the Storage and Disposal section of the label by Notification according to the directions stated in PR Notice 2007-4.

Attached are:

- One copy of the label with the changes clearly marked
- One unmarked copy of the label
- A CD of the unmarked copy of the label for "Electronic Comparison and Review"
- Certificate with Respect to Label Integrity Form
- Completed EPA Form 8570-1

Thank you in advance for approving this Notification. If you have any questions, please contact me at 336-632-2494.

Sincerely,

Pat Dinnen  
Label Group Leader  
Regulatory Affairs

Enclosures

# Certification with Respect to Label Integrity

Version: 9/11/02

I certify that the information (including, but not limited to, text, tables, and graphics) contained in the electronic file identified below by file name and submitted with this certification is the same information as that on the paper copies of these documents included with this submission.

PROPOSED LABEL		
EPA Registration #	Date Submitted to EPA	Electronic file name
100-1130	8/16/2010	000100-01130.20100816.ACHIEVE-SC_NOTIF_AUG2010.pdf

I certify that the statements that I have made on this form are true, accurate, and complete. I acknowledge that any knowingly false or misleading statements may be punishable by fine or imprisonment or both under applicable law.

*Pat Dinnen*

\_\_\_\_\_  
Signature

August 16, 2010

\_\_\_\_\_  
Date

Pat Dinnen

\_\_\_\_\_  
Name (typed)

Label Group Leader

\_\_\_\_\_  
Title

**Booklet  
(2.16 gal.)**

**Achieve® SC Herbicide**

Postemergence Herbicide for Control of Annual Grass Weeds in Wheat, Barley, and Triticale

Active Ingredient:

Tralkoxydim

2-Cyclohexen-1-one, 2-[1-(ethoxyimino)propyl]-3-hydroxy-

5-(2,4,6-trimethylphenyl)-(9CI)..... 35.0%

Other Ingredients: 65.0%

Total: 100.0%

Contains 3.33 lbs. active ingredient per gallon or 400 grams a.i./L.

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

**See additional precautionary statements and directions for use inside booklet.**

EPA Reg No. 100-1130  
EPA Est 100-NE-001

**NOTIFICATION**

**SEP 08 2010**

Product of United Kingdom  
Formulated in the USA

SCP 1130

2.16 gallons  
Net Contents

<b>FIRST AID</b>	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
<b>HOTLINE NUMBER</b> For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call <b>1-800-888-8372</b>	

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**PRECAUTIONARY STATEMENTS**

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**Hazards to Humans and Domestic Animals**

**CAUTION**

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing.

## Personal Protective Equipment (PPE)

### Applicators and other handlers must wear:

- Chemical-resistant gloves – Category A (e.g., barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC), or viton)
- Long-sleeved shirt and long pants
- 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.

### 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 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. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water or rinsate.

### Spray Drift

Do not make aerial applications under conditions involving possible drift to nontarget plants. Refer to the local state laws, regulations, and guidelines for proper application to avoid off-target movement.

### Physical and Chemical Hazards

Do not use or store near heat or open flame.

**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 buying or 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 should 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, Inc. or Seller. All such risks shall be assumed by Buyer and User, and 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. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

OK

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY 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 Limitations of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

## 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. 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:

- Chemical-resistant gloves – Category A (e.g., barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC), or viton)
- Coveralls
- Shoes plus socks

### STORAGE AND DISPOSAL

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

#### **Pesticide Storage**

~~Keep container tightly closed when not in use. Keep away from heat and flame. Do not store near seed, fertilizers, or foodstuffs. Store above 23°F. Shake well before use.~~

**Pesticide Disposal**

~~Open dumping is prohibited. Waste 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 by other procedures approved by state and local authorities.~~

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**GENERAL INFORMATION**

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Achieve SC Herbicide is a systemic, postemergence herbicide for the selective control of wild oats, volunteer tame oats, green foxtail, yellow foxtail, annual (Italian) ryegrass, and Persian dandelion in all wheat and barley varieties. Perennial grasses such as quackgrass will not be controlled. Although susceptible grass weeds treated with Achieve SC Herbicide cease growth soon after application, complete die-back of the weeds could take up to 4 weeks.

Achieve SC Herbicide does not control broadleaf weeds; however, several broadleaf weed herbicides can be tank mixed with Achieve SC Herbicide to provide broad spectrum weed control in cereals (see appropriate section of label for this information).

Achieve SC Herbicide is not affected by rain falling one hour or more after application.

**INFORMATION ON WEED RESISTANCE**

Naturally occurring biotypes of certain grass species with resistance to this herbicide and related products (same mode of action) are known to exist. Selection of resistant biotypes through repeated use of these herbicides may result in control failures. If poor performance cannot be attributed to adverse weather conditions or improper application methods, a resistant biotype may be present. In such a case, additional treatments with this herbicide or related products is not recommended. Consult your local Syngenta Crop Protection representative or agricultural advisor for assistance.

**Do not** apply Achieve SC Herbicide on spring wheat in Minnesota, East of Highway 281 in North Dakota, or in South Dakota. In addition, do not apply Achieve SC Herbicide in the following counties in North Dakota: Dickey, LaMoure, Stutsman, Foster, Eddy, Ramsey, and Towner. Use of Achieve SC Herbicide in these areas may result in crop injury to spring wheat. Syngenta Crop Protection, Inc., will not be liable for injury to spring wheat if Achieve SC Herbicide is used in these areas.

## GENERAL USE PRECAUTIONS

Achieve SC Herbicide is a postemergence herbicide for use in wheat and barley. Do not use in tame oat crops. Avoid drift onto tame oat and corn crops. Tillered cereal crops may incur injury if applications are made within 48 hours of freezing temperatures. Nontillering cereal crops which are exposed to temperatures of less than 40°F up to 48 hours either before or after application, may incur injury. Unacceptable crop injury could also occur when Achieve SC Herbicide is applied to crops under stress due to high temperatures, drought, excess soil moisture, foliar diseases, insect damage, or lack of fertility.

When weeds are stressed due to drought, heat, lack of fertility, flooding, or prolonged cool temperatures, control can be reduced or delayed since the grasses are not actively growing. Grass escapes or re-tillering may occur when application is made under prolonged stress conditions. Optimum weed control will be obtained if application of Achieve SC Herbicide is delayed until the stress conditions have ended and weeds are once again actively growing.

Do not apply Achieve SC Herbicide to crops or weeds that have heavy dew cover.

Tank mixing Achieve SC Herbicide with amine formulations of labeled herbicides or any other herbicide, insecticide, fungicide, fertilizer solution, or adjuvant not recommended on this label or other Syngenta labeling may result in poor grass control and/or unacceptable crop injury.

Crop injury may occur with registered tank mixes under extreme weather conditions or when the crop is suffering from stress due to inadequate or abnormally high moisture levels, extreme temperature, or from spray overlaps.

Weed control can be reduced when Achieve SC Herbicide is applied to fields which received a soil residual sulfonylurea herbicide treatment the previous year.

Unacceptable weed control may be obtained when Achieve SC Herbicide is applied with spray equipment containing residual spray solution or other spray residues from a previous sulfonylurea herbicide application. Ensure such sprayers are thoroughly cleaned before adding Achieve SC Herbicide to the spray tank.

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

Flood or sprinkler irrigation can cause subsequent germination of wild oats and other grass weeds. For optimum weed control in irrigated crops, apply Achieve SC Herbicide after irrigation when new weed germination is complete.

## ROTATIONAL CROPS

The following crops may be planted at the specified interval following application of

Achieve SC Herbicide.

Crop	Rotational Interval
Cereal Grains and Leaf Crop Groups	30 days
All Other Crops	106 days

**APPLICATION PROCEDURES**

**WEEDS CONTROLLED AND USE RATES**

The maximum seasonal application rate for tralkoxydim is 0.25 lb. a.i./A (9.6 fl. oz./A Achieve SC Herbicide).

Weed	Achieve SC Rate <sup>1</sup>
Wild Oats Volunteer Tame Oats Green Foxtail Yellow Foxtail Annual (Italian) Ryegrass Persian Darnel	6.9-9.2 fl. oz./A (0.18-0.24 lb. a.i./A)

<sup>1</sup>Use the high rate when soil is dry, weeds are large, weed population is high or crop canopy is dense.

**Note:** In Minnesota, Montana, North Dakota, and South Dakota, apply Achieve SC Herbicide only at 6.9 fl. oz./A (0.18 lb. a.i./A). Do not apply Achieve SC Herbicide on spring wheat in Minnesota, East of Highway 281 in North Dakota, or in South Dakota. In addition, **do not** apply Achieve SC Herbicide in the following counties in North Dakota: Dickey, LaMoure, Stutsman, Foster, Eddy, Ramsey, and Towner. Use of Achieve SC Herbicide in these areas may result in crop injury to spring wheat. Syngenta Crop Protection, Inc. will not be liable for injury to spring wheat if Achieve SC Herbicide is used in these areas.

Apply Achieve SC Herbicide to actively growing grasses for best results. Grasses emerging after application of Achieve SC Herbicide will not be controlled. Achieve SC Herbicide will not control broadleaf weeds. See **Tank Mixing Recommendations** section of label for information on recommended tank mixes for broad spectrum weed control.

**APPLICATION TIMING**

Weed	Weed Growth Stage
Wild Oats	1-6 leaf (total leaves including tillers). Wild oats will be controlled up to the emergence of the third tiller.
Volunteer Tame Oats	1-6 leaf (total leaves including tillers).
Green Foxtail, Yellow Foxtail	1-5 leaf (total leaves including tillers).
Annual (Italian) Ryegrass	1-4 leaf (total leaves including tillers). Best control of annual (Italian) ryegrass is obtained when application is made in the fall, prior to the dormancy period.
Persian Darnel	1-4 leaf (total leaves including tillers).

**SPRAY ADDITIVES**

Always add Supercharge® Adjuvant to the spray solution at a rate of 4 pts./100 gals. of water (0.5% v/v). Use of incorrect Supercharge rates or alternative adjuvants may result in unacceptable weed control or crop injury.

In addition, always add ammonium sulfate to the spray solution at a rate of 7-15 lbs./100 gals. when spray water contains more than 400 ppm bicarbonate ions. Only use granular or liquid ammonium sulfate formulations which do not contain additional wetters or surfactants. Water from deep wells is more likely to require addition of ammonium sulfate compared to surface water sources. Addition of ammonium sulfate can also provide enhanced weed control under low moisture or high temperature stress conditions as well as when tank mixing with broadleaf weed herbicides.

**Note:** Refer to the **Mixing Procedures** section for the correct order of addition of spray additives.

**SPRAY EQUIPMENT**

**APPLICATION INSTRUCTIONS**

Achieve SC Herbicide may be applied by either ground sprayers or by aerial application.

**Ground:** Apply in a spray volume of 10-15 gals./A. Use the higher end of water volume range when grass foliage is dense. Apply at a pressure of 30-40 psi to ensure proper dispersion, spraying characteristics, and performance of Achieve SC Herbicide.

Flat fan nozzles of 80° or 110° are recommended for optimum coverage. Do not use floodjet nozzles or controlled droplet application equipment. Ensure that all in-line strainer and nozzle screens in the sprayer are 50 mesh or coarser. Screens of 80 mesh size or finer should not be used.

Always ensure that agitation is maintained until spraying is completed, even if stopped for brief periods of time. If the agitation is stopped for more than 5 minutes, resuspend the spray solution by running on full agitation prior to spraying. Achieve SC Herbicide must be sprayed within the same day of mixing.

**Aerial:** Apply in a spray volume of 3-5 gals./A. When grass foliage is dense, use the higher end of water volume range. Use sufficient spray water volume to ensure complete dispersion of Achieve SC Herbicide in the spray tank when mixing and during application. When making aerial applications, care should be taken to avoid drift to crops other than wheat or barley. Avoid drift to nontarget areas. Do not spray when conditions are favorable for drift or when wind velocity exceeds 10 mph.

When spraying is completed and prior to using other products, ensure the spray system is thoroughly rinsed with clean water to remove any remaining Achieve SC Herbicide residues. Using a pressure washer and the addition of a detergent or a nonionic surfactant to the rinse water will enhance removal of residues.

### **SPRAY DRIFT**

Avoid spray drift. Do not apply when weather conditions may cause drift. Do not allow this product to drift onto nontarget areas. Drift may result in illegal residues or injury to adjacent crops and vegetation. To avoid spray drift, DO NOT apply aerially when wind speed is greater than 10 mph or during periods of temperature inversions. Use of larger droplet size will also reduce spray drift.

**AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND GROWER.**

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target 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.

The distance of the outer most nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.

Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45°.

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**.

## **AERIAL DRIFT REDUCTION ADVISORY**

(This section is advisory in nature and does not supersede the mandatory label requirements.)

### **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  $\frac{3}{4}$  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 feet above the top of the target 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 cross wind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator should 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**

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

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

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## **MIXING PROCEDURES**

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### **MIXING INSTRUCTIONS**

Follow the mixing instructions below for adding Achieve SC Herbicide to the spray tank.

1. Ensure the sprayer is cleaned according to instructions on label of the product used prior to Achieve SC Herbicide.
2. Fill spray tank  $\frac{1}{2}$  full with clean water.
3. Begin tank agitation and continue throughout mixing and spraying operations.
4. Add ammonium sulfate (if used).
5. Add dry (WP, DF, WDG, etc.) broadleaf herbicide products (if used).
6. Add Achieve SC Herbicide.
7. Add liquid (EC, SC, L, F, etc.) broadleaf herbicide products (if used).
8. Add Supercharge Adjuvant.
9. Fill spray tank to desired level with water.

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## **CROP USE DIRECTIONS**

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### **CROPS**

Achieve SC Herbicide can be used in all varieties of wheat and all 2- or 6-row varieties of barley (malting and general-purpose varieties including semidwarf and hulless) and triticale. Achieve SC Herbicide may be applied to wheat or barley and triticale up to the flag leaf stage.

### **HARVESTING INTERVALS**

Minimum interval to harvest is 60 days after treatment with Achieve SC Herbicide.

Immature crops (forage) may be grazed or cut for hay 30 days after treatment.

Mature straw and grain may be fed to livestock 45 days after treatment.

## TANK MIXING INSTRUCTIONS

**Unless otherwise noted, tank mixes are limited to wheat and barley only.**

For broad spectrum control of annual grasses and broadleaf weeds, tank mix Achieve SC Herbicide with one of the broadleaf herbicides or broadleaf herbicide combinations listed in the following tables. Consult the label of the tank mix partner for a list of broadleaf weeds controlled, rates, timing, re-cropping restrictions, grazing interval restrictions, directions for use, and precautions. Use in accordance with the most restrictive of label limitations and precautions. No label dosage rates may be exceeded. This product cannot be mixed with any other product whose label prohibits such a mixture.

**Table 1: For control of wild oats, green foxtail, yellow foxtail, annual (Italian) ryegrass, Persian darnel and broadleaf weeds (refer to tank mix partner label for specific weeds controlled), tank mix Achieve SC Herbicide at 6.9 to 9.2 fl. oz./A plus only one of the following broadleaf herbicides.**

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

Broadleaf Herbicide	Rate	Remarks
2,4-D ester (assume 4 lbs./gal.)	0.5-1 pt./A	<ul style="list-style-type: none"> <li>This tank mix is recommended only in Minnesota, Montana, North Dakota, and South Dakota.</li> <li>Ammonium sulfate must be added to this tank mix.</li> <li>Control of green foxtail and yellow foxtail may be reduced under adverse growing conditions with this tank mix.</li> </ul>
Bronate Advanced™ <sup>1</sup>	0.6-1.2 pts./A	<ul style="list-style-type: none"> <li>Do not exceed 0.8 pt./A of Bronate Advanced in a tank mix with Achieve SC Herbicide in Minnesota, Montana, North Dakota, and South Dakota.</li> </ul>
Buctril® <sup>2,3</sup>	0.75-1.5 pts./A	<ul style="list-style-type: none"> <li>Control of green foxtail and yellow foxtail may be reduced under adverse growing conditions with this tank mix.</li> </ul>
Curtail™ M	1.75-2 pts./A	
MCPA ester (assume 4 lbs./gal.)	0.5-1 pt./A	
Starane™	0.5-0.66 pt./A	
Starane + 2,4-D ester	0.5-0.66 pt./A + 0.5-1 pt./A	<ul style="list-style-type: none"> <li>This tank mix is recommended only in Minnesota, Montana, North Dakota, and South Dakota.</li> <li>Ammonium sulfate must be added to this tank mix.</li> <li>Control of green foxtail and yellow foxtail may be reduced under adverse growing conditions with this tank mix.</li> </ul>
Starane + MCPA ester	0.5-0.66 pt./A + 0.5-1 pt./A	
Starane + Sword®	1.12-1.5 pts./A	
Stinger™	0.25-0.33 pt./A	

<sup>1</sup>Other equivalent products containing the active ingredients bromoxynil/MCPA esters may be used.

<sup>2</sup>Other equivalent products containing the active ingredient bromoxynil ester may be used.

<sup>3</sup>Wheat, barley, and triticale.

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**Table 2: For control of wild oats and broadleaf weeds (refer to tank mix partner label for specific weeds controlled), tank mix Achieve SC Herbicide at 6.9 to 9.2 fl. oz./A plus only one of the following single or two-way broadleaf herbicide combinations**

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

Broadleaf Herbicide	Rate	Remarks
Harmony® GT <sup>1,2,3,6</sup>	0.3-0.5 oz./A	
Harmony GT <sup>1,2,3</sup> + 2,4-D ester	0.3-0.5 oz./A + 0.5-1 pt./A	<ul style="list-style-type: none"> <li>This tank mix is recommended only in Minnesota, Montana, North Dakota, and South Dakota.</li> <li>Ammonium sulfate must be added to this tank mix.</li> </ul>
Harmony GT <sup>1,2,3,6</sup> + Bronate Advanced <sup>4</sup>	0.3-0.5 oz./A + 0.6-1.2 pts./A	<ul style="list-style-type: none"> <li>Do not exceed 0.8 pt./A of Bronate Advanced in a tank mix with Achieve SC Herbicide in Minnesota, Montana, North Dakota, and South Dakota.</li> </ul>
Harmony GT <sup>1,2,3,6</sup> + Buctril <sup>5,6</sup>	0.3-0.5 oz./A + 0.75-1.5 pts./A	
Harmony GT <sup>6</sup> + Starane <sup>2,3</sup>	0.3 oz./A + 0-0.5-0.66 pt./A	
Harmony GT <sup>1,2,3,6</sup> + MCPA ester	0.3-0.5 oz./A + 0.5-1 pt./A	

<sup>1</sup>Wild oat control may be reduced when Achieve SC Herbicide is tank mixed with Harmony GT. To minimize the reduction in wild oat control, use the higher rate of Achieve SC Herbicide when using rates of Harmony GT greater than 0.3 oz./A.

<sup>2</sup>Addition of a surfactant other than Supercharge Adjuvant is not required.

<sup>3</sup>Harmony GT XP may be substituted for Harmony GT.

<sup>4</sup>Other equivalent products containing the active ingredients bromoxynil/MCPA esters may be used.

<sup>5</sup>Other equivalent products containing the active ingredient bromoxynil ester may be used.

<sup>6</sup>Wheat, barley, and triticale.

**Achieve SC Herbicide may be tank mixed with other herbicides registered for use on wheat and barley provided that this label does not prohibit such mixing. Follow the most restrictive label directions, precautions, and prohibitions for all products used.**

Herbicides not specified on this label for tank mixing with Achieve SC Herbicide may be applied separately in sequence. For best results, always apply Achieve SC Herbicide first and allow at least 7 days after the application of Achieve SC Herbicide before applying other herbicides. Reduced grass control should be expected if Achieve SC Herbicide is not applied first.

## TANK MIX APPLICATION WITH WARRIOR® INSECTICIDE

Achieve SC Herbicide may be applied in combination with Warrior Insecticide for wild oat control and insect control. Apply Achieve SC Herbicide at 6.9-9.2 fl. oz./A in a tank mix with Warrior Insecticide at recommended use rates. Add Warrior to the tank first, followed by Achieve SC Herbicide. Refer to the Warrior label for specific use directions, application rates, restrictions and a list of insects controlled.

## TANK MIXTURES WITH LIQUID NITROGEN FERTILIZERS

Achieve SC Herbicide may be tank mixed in a spray solution with liquid nitrogen fertilizers. Liquid nitrogen fertilizers may be used at rates up to 5 gallons per acre but must be diluted at a minimum of 1:1 ratio of water. These N-based tank mixtures may be used in conjunction with ammonium sulfate. AMS should be maintained in the tank mix when using water with high bicarbonate levels (greater than 400 ppm). Follow the mixing instructions below for adding liquid nitrogen fertilizer and Achieve SC Herbicide to the spray tank.

1. Fill spray tank ½ full with clean water.
2. Begin tank agitation and continue throughout mixing and spraying operations.
3. Add solid (DF, DG, etc.) broadleaf herbicides (if used).
4. Add ammonium sulfate (if used).
5. Add Achieve SC Herbicide.
6. Add liquid nitrogen fertilizer.
7. Add liquid broadleaf herbicides (if used).
8. Add Supercharge Adjuvant.
9. Fill spray tank to desired level with water.

When using Achieve SC 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 mixtures with liquid nitrogen fertilizers.

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## STORAGE AND DISPOSAL

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

### Pesticide Storage

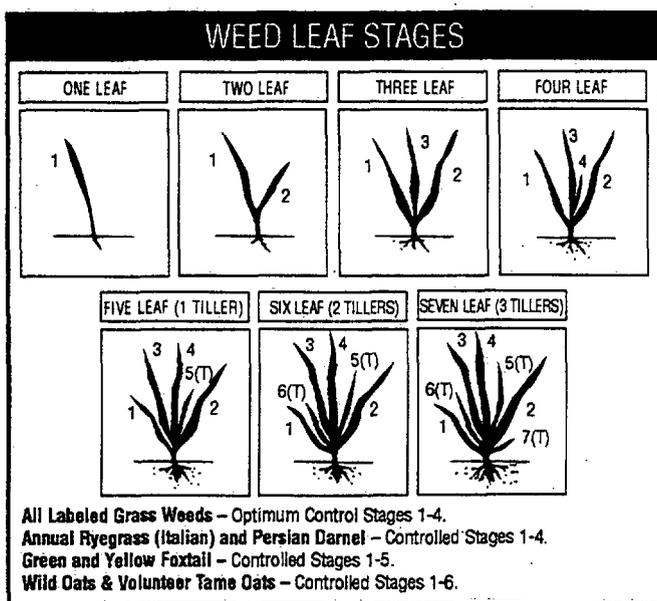
Keep container tightly closed when not in use. Keep away from heat and flame. Do not store near seed, fertilizers, or foodstuffs. Store above 23°F. Shake well before use.

### Pesticide Disposal

Open dumping is prohibited. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

### Container Handling/Disposal

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 and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use 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 reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration or other procedures approved by state and local authorities.



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Curtail®, Starane®, and Stinger® trademarks of Dow AgroSciences

Harmony® trademark of E. I. duPont de Nemours & Co., Inc.

Sword® trademark of Platte Chemical Co.

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

Product of United Kingdom  
Formulated in the USA

Syngenta Crop Protection, Inc.  
Greensboro, North Carolina 27409  
[www.syngenta-us.com](http://www.syngenta-us.com)

SCP 1130

Base Label  
(2.16 gal.)

Achieve® SC Herbicide

Postemergence Herbicide for Control of Annual Grass Weeds in Wheat, Barley, and  
Triticale

Active Ingredient:

Tralkoxydim

2-Cyclohexen-1-one, 2-[1-(ethoxyimino)propyl]-3-hydroxy-

5-(2,4,6-trimethylphenyl)-(9CI)..... 35.0%

Other Ingredients: 65.0%

Total: 100.0%

Contains 3.33 lbs. active ingredient per gallon or 400 grams a.i./L.

See additional precautionary statements and directions for use inside booklet

**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.

EPA Reg No. 100-1130  
EPA Est. 100-NE-001

Product of United Kingdom  
Formulated in the USA

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Syngenta Crop Protection, Inc.  
Greensboro, North Carolina 27409  
[www.syngenta-us.com](http://www.syngenta-us.com)

SCP 1130

2.16 gallons  
Net Contents

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

**Precautionary Statements**

**Hazards to Humans and Domestic Animals**

**CAUTION**

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing.

<b>FIRST AID</b>	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
<b>HOTLINE NUMBER</b> For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call <b>1-800-888-8372</b>	

## 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.

## 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. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water or rinsate.

## Spray Drift

Do not make aerial applications under conditions involving possible drift to nontarget plants. Refer to the local state laws, regulations, and guidelines for proper application to avoid off-target movement.

## Physical and 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

Keep container tightly closed when not in use. Keep away from heat and flame. Do not store near seed, fertilizers, or foodstuffs. Store above 23°F. Shake well before use.

## Pesticide Disposal

Open dumping is prohibited. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

## Container Handling/Disposal

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 and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use 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 reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration or other procedures approved by state and local authorities.

ACHIEVE SC 1130 MAS 06-12-06 – pd – 06/25/07

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