

# Ascend® PRO

## PLANT GROWTH REGULATOR

*Hormone compounds to stimulate plant growth.*

### ACTIVE INGREDIENTS

*Cytokinin, as Kinetin .....	0.090%
*Gibberellins (GA <sub>4</sub> + GA <sub>7</sub> ) .....	0.030%
*Indole-3-butyric Acid.....	0.045%

<b>OTHER INGREDIENTS</b> .....	<u>99.835%</u>
<b>TOTAL</b>	<b>100.000%</b>

\*Contains 0.03 oz. cytokinin, as kinetin/qt.

\*Contains 0.01 oz. Gibberellins (GA<sub>4</sub> + GA<sub>7</sub>)/qt.

\*Contains 0.015 oz. indole-3-butyric acid/qt.

### KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
<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>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. <b>HOTLINE NUMBER:</b> In case of medical emergency call 1-877-424-7452.	

**SEE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS, COMPLETE DIRECTIONS FOR USE, WARRANTY DISCLAIMER AND LIMITATION OF WARRANTY.**

**SHAKE WELL BEFORE USING.**

EPA Reg. No. 1381- 266

EPA Est. No. \_\_\_\_\_

NET CONTENTS:

Distributed by:  
WINFIELD SOLUTIONS, LLC  
P.O. Box 64589  
St. Paul, MN 55164

1/0724/9

## **PRECAUTIONARY STATEMENTS**

### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

Caution: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Wear the appropriate Personal Protective Equipment (PPE).

#### **Personal Protective Equipment:**

Mixers, loaders, applicators and other handlers must wear:

- long-sleeved shirt and long pants,
- shoes plus socks

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

#### **USER SAFETY RECOMMENDATIONS**

Users should:

- 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**

For terrestrial uses. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment washwater or rinsate.

Treated seed exposed on soil surface may be hazardous to birds, wildlife, fish, and aquatic invertebrates. Cover or collect seeds spilled during loading.

#### **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 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 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 and restricted-entry intervals. 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 4 hours unless wearing appropriate PPE.

**EXCEPTION:** If the product is 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 over long-sleeved shirt and long pants,
- chemical-resistant gloves, and
- shoes plus socks.

### **GENERAL CHEMIGATION INSTRUCTIONS**

Apply this product only through furrow irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Maintain agitation in the supply tank while adding the required amount of ASCEND PRO, and throughout the application. ASCEND PRO should be added to the supply tank at the end of water application (prior to last complete cycle in moving systems).

The correct amount of ASCEND PRO to add is calculated as the rate in fluid ounces per acre x the number of acres covered by the contents of the supply tank.

(For example, if the supply tank covers ten acres and the rate on the label for that crop is 2 fluid ounces per acre, add  $10 \times 2 = 20$  fluid ounces to the supply tank at the beginning of the last full cycle).

### **CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS**

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with the pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

The pesticide supply tank should be agitated throughout the application of ASCEND PRO. ASCEND PRO should be applied at the end of the water application.

ASCEND PRO should be applied at the end of the irrigation period in a sufficient amount of water to allow proper coverage of plant or crop but not to exceed 19.2 fluid ounces of ASCEND PRO per acre per application.

### **IN-FURROW CHEMIGATION**

1. Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.

2. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

a. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

f. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Maintain agitation in the supply tank while adding the required amount of ASCEND PRO, and throughout the application. ASCEND PRO should be added to the supply tank at the end of water application (prior to last complete cycle in moving systems).

The correct amount of ASCEND PRO to add is calculated as the rate in fluid ounces per acre x the number of acres covered by the contents of the supply tank.

(For example, if the supply tank covers ten acres and the rate on the label for that crop is 2 fluid ounces per acre, add  $10 \times 2 = 20$  fluid ounces to the supply tank at the beginning of the last full cycle).

**IMPORTANT:** Read the entire "Directions for Use" and the "Notice" before using this product. If terms are not acceptable, return the unopened product container at once.

### PRODUCT INFORMATION

ASCEND PRO is a tool to increase plant efficiency. Test results have shown that this product can stimulate higher yields through a larger root mass, earlier fruiting and increased fruit retention.

Acting through its unique combination of plant growth regulators, ASCEND PRO has been shown to increase plant photosynthesis and reduce oxidative stress leading to enhanced biomass accumulation. Contains an amino acid derivative that helps mitigate plant stress.

### DILUTION RATES

Apply ASCEND PRO by ground. If applied by ground on vegetable or field crops, use 5 to 25 gallons of water per acre.

### SPRAY PROGRAM FOR VEGETABLE CROPS

#### SWEET CORN AND POPCORN:

Apply in-furrow or alternatively 2 inches beside and 2 inches below seed or alternatively 3 inches below the seed with a strip till machine at planting. Application rate is dependent on row spacing. Reference the chart below for rate information.

Row Spacing	Rate of ASCEND PRO (fl. oz./acre)
30 inch	4.7 to 6.3
20 inch	7.0 to 9.5

#### WHITE OR RED POTATOES:

Apply 4.7 to 6.3 fluid ounces per acre in a band, mark out, side dress or in-furrow application before or after planting.

**NOTE:** If seed has been treated with ASCEND PRO, do not apply ASCEND PRO as an in-furrow, band, side dress or mark out application.

#### SWEET POTATOES AND YAMS:

At transplant, apply 16-32 fluid ounces of ASCEND PRO per acre in the transplant water solution.

**NOTE:** If seed has been treated with ASCEND PRO, do not apply ASCEND PRO as an in-furrow, band, side dress or mark out application.

### SPRAY PROGRAM FOR FIELD CROPS

#### COTTON - Non-Transgenic Varieties:

Apply 3.4 fluid ounces per acre in-furrow or alternatively 2 inches beside and 2 inches below seed or alternatively 3 inches below the seed with a strip till machine at planting.

**COTTON - Transgenic Varieties:**

(Cotton varieties that have been genetically manipulated to have insect-resistance and/or herbicide-resistance built in)

Apply 3.4 fluid ounces per acre in-furrow or alternatively 2 inches beside and 2 inches below seed or alternatively 3 inches below the seed with a strip till machine at planting.

**FIELD CORN:**

Apply in-furrow or alternatively 2 inches beside and 2 inches below seed or alternatively 3 inches below the seed with a strip till machine at planting. Application rate is dependent on row spacing. Reference the following chart for rate information.

<b>Row Spacing</b>	<b>Rate of ASCEND PRO fl. oz./acre</b>
30 inch	4.7 to 6.3
20 inch	7.0 to 9.5

**FIELD CORN GROWN FOR SEED:**

Apply in-furrow or alternatively 2 inches beside and 2 inches below seed or alternatively 3 inches below the seed with a strip till machine at planting. Application rate is dependent on row spacing. Reference the following chart for rate information.

<b>Row Spacing</b>	<b>Rate of ASCEND PRO fl. oz./acre</b>
30 inch	4.7 to 6.3
20 inch	7.0 to 9.5

**GRAIN SORGHUM:**

Apply 4.7 to 6.3 fluid ounces per acre in-furrow or alternatively 2 inches beside and 2 inches below seed or alternatively 3 inches below the seed with a strip till machine at planting.

**PEANUTS:** Apply according to one or both of the following schedules.

Apply 4.7 to 6.3 fluid ounces per acre in-furrow or alternatively 2 inches beside and 2 inches below seed or alternatively 3 inches below the seed with a strip till machine at planting.

**SUGAR BEETS:**

In-Furrow or Mark Out:

Apply 4.7 to 6.3 fluid ounces per acre in-furrow or mark out.

**SUGARCANE:**

Apply 2.1 fluid ounces per acre in the furrow at planting.

**SUNFLOWERS:**

Apply 3.4 to 4.2 fluid ounces per acre in-furrow at planting.

**WHEAT, BARLEY, OATS, AND RYE:**

Apply 4.7 to 6.3 fluid ounces per acre in-furrow at planting.

**SEED TREATMENT****RED OR WHITE POTATOES:**

Choose *one* of the following methods:

Dip potato seed pieces in a solution of 1 part ASCEND PRO to 355 parts water (0.4 fluid ounces/gal. of water) for 30 to 60 seconds or spray seed pieces with the above solution so that seed pieces are covered and thoroughly wetted. ASCEND PRO can be used with a fungicide program.

**OR**

Use 0.5 to 1.05 fluid ounces (volumetric measurement), which equals 15.8 to 32.2 grams on a dry basis of ASCEND PRO per 100 lbs. of cut seed pieces. Treat seed pieces immediately after they have been cut. Apply so that the cut seed pieces are thoroughly covered. ASCEND PRO can be mixed with other seed treatments and carriers such as fir and alder bark to insure uniform coverage.

**NOTE:** If seed has been treated with ASCEND PRO, do not apply ASCEND PRO as an in-furrow, band, side dress or mark out application.

#### **SWEET POTATOES AND YAMS:**

Dip potato slips in a solution of 1 part ASCEND PRO to 355 parts water (0.4 fluid ounces/gal. of water) for 30 to 60 seconds. ASCEND PRO can be used with a fungicide program.

**NOTE:** If seed has been treated with ASCEND PRO, do not apply ASCEND PRO as an in-furrow, band, side dress or mark out application.

#### **SPECIAL NOTE FOR ALL TRANSPLANTED CROPS**

Two methods are recommended for this program:

- A. Dip or spray roots with a solution of 0.8 fluid ounces of ASCEND PRO per gallon of water prior to transplanting.
- B. Bedding seedlings may be sprayed or drenched in flats 12-24 hours before transplanting to reduce transplant shock with a solution of 0.8 fluid ounces of ASCEND PRO per gallon of water.

#### **STORAGE AND DISPOSAL**

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

**Pesticide Storage:** Protect from freezing. Store out of direct sunlight.

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

**Container Handling:** Use label language appropriate for container size and type.

**Nonrefillable containers.** Do not reuse or refill this container. Clean container promptly after emptying.

**Nonrefillable container equal to or less than 5 gallons.** 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  $\frac{1}{4}$  full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning 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.

**Nonrefillable container greater than 5 gallons.** Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Tip the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling or reconditioning 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.

**Refillable container.** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person

disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling or reconditioning 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 CHEMICAL EMERGENCY: Spill, leak, fire, exposure or accident, call  
CHEMTREC 1-800-424-9300.**

#### **WARRANTY DISCLAIMER**

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

#### **LIMITATION OF LIABILITY**

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THE NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

Ascend® is a registered trademark of Winfield Solutions, LLC.