

A person is standing in a field of tall corn plants. They are holding a marker in their right hand and a clipboard in their left hand. A sensor device is visible on the left side of the image. The background is a blue-tinted photograph of the corn field.

# ASCEND<sup>2</sup><sup>®</sup>

**PGR GUIDE**

[WINFIELDUNITED.COM](http://WINFIELDUNITED.COM)

**Ascend<sup>2</sup><sup>®</sup>**

**GET CORN EMERGING FASTER AND ROOTS GROWING STRONGER WITH ASCEND<sup>2</sup> PGR.**

# BUILT FOR IT.

## OPTIMIZED CORN IN-FURROW PGR BLEND

Ascend<sup>2</sup> plant growth regulator allows your genetics to live up to their potential by helping accelerate early-season development, improve germination and enhance root growth to build a strong foundation to help protect your investment from adverse conditions.

## FEATURES & BENEFITS

- Ascend<sup>2</sup> plant growth regulator (PGR) is the only auxin-dominant three-way PGR mixture on the market, which is important because auxins are crucial for early-season growth and help alleviate early-season crop stress.
- The unique, patented ratio of auxin, gibberellic acid and cytokinin in Ascend<sup>2</sup> PGR is optimized for in-furrow corn acres to help you protect your investment.
- Researched across 67 sites over 4 years, Ascend<sup>2</sup> PGR is data-backed to prove its consistent performance.

## USE RATE

- Corn in-furrow: 4.7-6.3 oz./A

## APPLICATION GUIDE

- See label for specific rates and timing by crop.

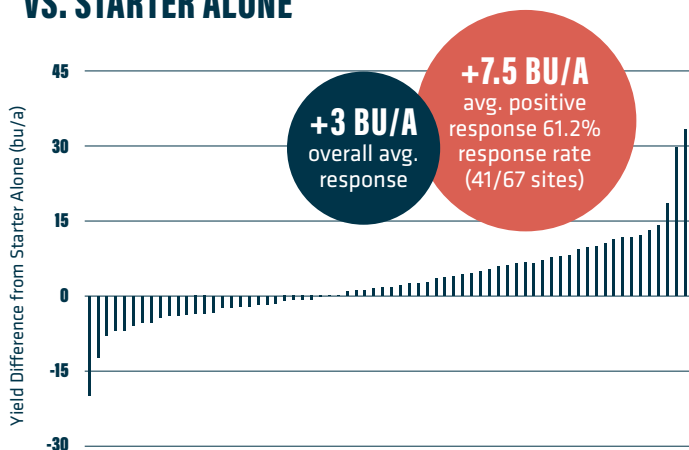
## ACTIVE INGREDIENTS

- 0.103%: Auxin, as Indole-3-butyric Acid
- 0.062%: Gibberellic Acid (GA<sub>4</sub> + GA<sub>7</sub>)
- 0.012%: Cytokinin, as Kenetin

## PACKAGING

- 2 x 2.5-gallon jugs
- 125-gallon totes

## ASCEND<sup>2</sup> PGR IMPROVED YIELD VS. STARTER ALONE



**P-VALUE A 0.05: 0.004 (OVERALL AVG. RESPONSE); <0.0001 (AVG. POSITIVE RESPONSE)**

## EXAMPLES OF ASCEND<sup>2</sup> PGR ACCELERATING ABOVE-GROUND DEVELOPEMENT & ROOT GROWTH

CORN 13 DAYS AFTER PLANTING

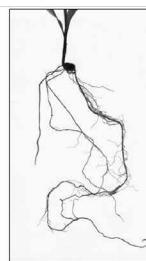


Untreated



Ascend<sup>2</sup>

CORN 17 DAYS AFTER PLANTING



Untreated



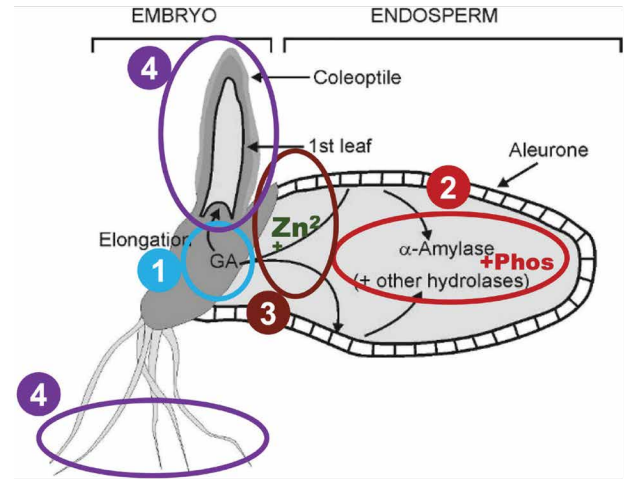
Ascend<sup>2</sup>



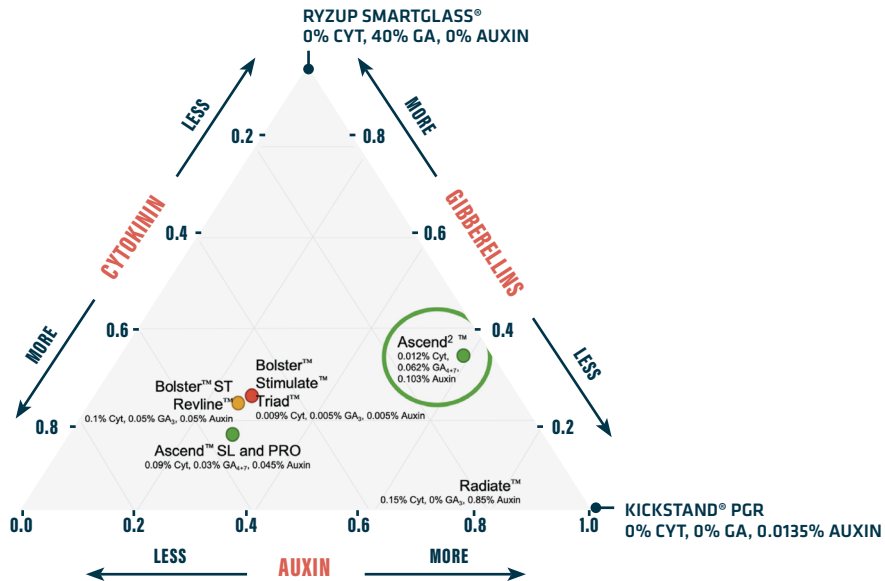
## HOW DOES GERMINATION WORK?

### FOUR STEPS TO SEED GERMINATION

1. Gibberillic acid (GA) turns the lights on hydrating upon imbibition and coding RNA for the amylase enzyme.
2. Phosphorus as an energy source. Amylase needs to breakdown starches stored in the endosperm into sugar.
3. Zinc acts as the forklift that move the sugar from the endosperm to feed the developing embryo.
4. Plant growth regulators (PGRs) facilitate seedling growth.
  - Auxin increases cell division and helps extend the coleoptile to the surface.
  - Cytokinin works on the cell differentiation by helping cells become different parts of the plant.



## ASCEND<sup>2</sup> IS A UNIQUE 3-WAY PGR SPECIFICALLY DESIGNED FOR IN-FURROW CORN



## ASCEND<sup>2</sup> PLANT GROWTH REGULATOR CAN LEAD TO MORE UNIFORM EAR SET.



STARTER + ZINC



ASCEND<sup>2</sup>

OUR DIFFERENTIATION  
WITH ASCEND<sup>2</sup> PGR CAN  
BE DEFENDED THROUGH  
MULTIPLE PATENTS



NOVEL RATIO AIs



SOLVENT PACKAGE



STARTER + ZINC



ASCEND<sup>2</sup>

ASCEND<sup>2</sup> CAN LEAD TO QUICKER, MORE EVEN GERMINATION

WHAT DO PGRS DO IN THE PLANT?

	AUXINS INITIATE ROOT GROWTH	GIBBERELLINS STIMULATE CELL DIVISION AND STEM ELONGATION	CYTOKININS (KINETIN) PROMOTE CELL DIVISION AND LEAF EXPANSION
WHAT ARE THEY?	<ul style="list-style-type: none"><li>Play a major role in plant growth alongside other plant hormones</li></ul>	<ul style="list-style-type: none"><li>Gibberellins are typically made in the roots</li></ul>	<ul style="list-style-type: none"><li>An important growth hormone in plants</li><li>Root tips are a major source of cytokinins</li></ul>
WHAT DO THEY DO?	<ul style="list-style-type: none"><li>Promote plant growth</li><li>Root initiation</li></ul>	<ul style="list-style-type: none"><li>Promote plant growth</li><li>Germination: Seed germination and seedling growth (amylase); breaking of seed dormancy</li><li>Vegetation: Stem elongation; promotes bolting and flowering; flowering and sex expression</li></ul>	<ul style="list-style-type: none"><li>Promotes plant growth</li><li>Cell division, differentiation and growth in shoots and roots</li></ul>

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ASCEND<sup>2</sup> FIELD BUILT BIGGER ROOTS, LEAVES AND EARS IN 2023 PLOTS



Location: Watertown, SD Answer Plot®. Photos: 1. taken 6/2023, 2. taken 8/2023, 3. taken 8/2023.

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ASCEND PORTFOLIO HAS OPTIONS FOR EVERY APPLICATION

ASCEND PRODUCT	CROPS	APPLICATION	FUNCTION
Ascend <sup>®</sup> ST3	 Soybeans & Cereals	Seed Treatment	Auxin-dominant formulation helps mitigate stress while promoting emergence and root growth.
Ascend <sup>2</sup> <sup>®</sup>	 Corn	In-Furrow	Auxin-dominant formulation helps achieve quick, even emergence and strong, deep roots.
Ascend <sup>®</sup> Pro	 Cotton, Peanuts, Sugar Beets & Small Grains	In-Furrow	Helps promote plant health, vigor and consistent performance in all environmental conditions.
Ascend <sup>®</sup> SL	 Corn, Soybeans, Cotton & Other Crops	Foliar	Supports cell division, leaf expansion and root formation ahead of critical reproductive stages.

© 2024 WinField United. Important: Before use always read and follow label instructions. Crop performance is dependent on several factors many of which are beyond the control of WinField United, including without limitation, soil type, pest pressures, agronomic practices and weather conditions. Growers are encouraged to consider data from multiple locations, over multiple years and to be mindful of how such agronomic conditions could impact results. Answer Plot, Ascend and Ascend<sup>2</sup> and WinField are trademarks of WinField United. All other trademarks are the property of their respective owners.



# Ascend<sup>2</sup>™

## PLANT GROWTH REGULATOR

*Hormone compounds to stimulate plant growth.*

### ACTIVE INGREDIENTS

*Cytokinin, as Kinetin .....	0.012%
*Gibberellins (GA <sub>4</sub> + GA <sub>7</sub> ) .....	0.062%
*Indole-3-butyric Acid .....	0.103%

<b>OTHER INGREDIENTS</b> .....	99.823%
<b>TOTAL</b> .....	100.000%

\*Contains 0.004 oz. cytokinin, as kinetin/qt.

\*Contains 0.021 oz. gibberellins (GA<sub>4</sub> + GA<sub>7</sub>)/qt.

\*Contains 0.035 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>
<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</li></ul>

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

See inside booklet for additional precautionary statements, directions for use, warranty disclaimer and limitation of liability.

### SHAKE WELL BEFORE USING.

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Caution: Causes moderate eye irritation. Harmful if swallowed. 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).

## NET CONTENTS: 2.5 GAL (9.46L)

EPA Reg. No. 1381-273

EPA Est. No. 63603-KS-1

### DISTRIBUTED BY:

WINFIELD SOLUTIONS, LLC,

P.O. BOX 64589, ST. PAUL, MN 55164

### 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.

## 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:** Follow 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 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 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 ¼ 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.**

# PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Caution: Cause moderate eye irritation. Harmful if swallowed. 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.

### PHYSICAL AND CHEMICAL HAZARDS

Do not use with or store near any oxidizing agents.

### DIRECTIONS FOR USE

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

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

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 (made of any waterproof material), and
- shoes plus socks.

### GENERAL CHEMIGATION INSTRUCTIONS

Apply this product only through sprinkler (including center pivot, lateral move, side (wheel) roll, traveler, big gun, solid set, hand move), furrow or drip 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<sup>2</sup>, and throughout the application. Ascend<sup>2</sup> 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<sup>2</sup> 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 x 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<sup>2</sup>. Ascend<sup>2</sup> should be applied at the end of the water application.

Ascend<sup>2</sup> 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<sup>2</sup> 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<sup>2</sup>; and throughout the application. Ascend<sup>2</sup> 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<sup>2</sup> 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 x 2 = 20 fluid ounces to the supply tank at the beginning of the last full cycle).

## DRIP CHEMIGATION

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 back flow.

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 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.

The system must contain functional inter-locking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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.

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.

Prior to adding Ascend<sup>2</sup> to the supply tank, start drip irrigation water and check for leaks.

Maintain agitation in the supply tank while adding the required amount of Ascend<sup>2</sup> and throughout the application.

If the drip irrigation tape is placed between rows, add Ascend<sup>2</sup> to the supply tank early in the irrigation cycle so the Ascend<sup>2</sup> is pushed close to the seed as the water moves through the soil.

If the drip irrigation is directly above the seed, add Ascend<sup>2</sup> to the supply tank as close as possible to the end of the drip irrigation cycle. Maximize direct Ascend<sup>2</sup> contact with the seed.

Calculate the amount of Ascend<sup>2</sup> to add to the supply tank by multiplying the rate, in fluid ounces per acre, by the number of acres to be covered by the contents of the supply tank. (For example, if the supply tank contents cover ten acres and the rate on the label for the crop is 6.3 fluid ounces per acre, add  $10 \times 6.3 = 63$  fluid ounces to the supply tank).

#### **SPRINKLER CHEMIGATION**

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.

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 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.

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

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 a 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 a system interlock.

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

Maintain agitation in the supply tank while adding the required amount of Ascend<sup>2</sup>, and throughout the application. Ascend<sup>2</sup> 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<sup>2</sup> 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).

Ascend<sup>2</sup> 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<sup>2</sup> per acre per application.

#### **DILUTION RATES**

Apply Ascend<sup>2</sup> by ground or air.

If applied by air, use 3 to 5 gallons of water per acre.

If applied by ground, use 5 to 25 gallons of water per acre on vegetable or field crops. Use 5 to 200 gallons of water per acre for tree and vine crops.

#### **SPRAY PROGRAM INSTRUCTIONS**

Test results have shown that this product can stimulate higher yields through a larger root mass, earlier fruiting and increased fruit retention. Ascend<sup>2</sup> is a tool to increase plant efficiency.

#### **SPRAY PROGRAM FOR VEGETABLE CROPS**

##### **BEANS AND PEAS:**

1st Application - Apply 3.4 fluid ounces per acre when the first trifoliate is unfolded.

2nd Application - Apply 3.4 fluid ounces per acre 2 weeks after the first application.

3rd Application - Apply 3.4 fluid ounces per acre at first bloom.

##### **ASPARAGUS, BROCCOLI, CABBAGE, CELERY, LETTUCE, MINT AND SPINACH:**

1st Application - Apply 3.4 fluid ounces per acre when the fifth leaf begins to unfold.

2nd Application - Apply 3.4 fluid ounces per acre 2 weeks after the first application.

3rd Application - Apply 3.4 fluid ounces per acre 2 weeks after the second application.

For maximum benefit, apply continuous applications of 0.8 - 1.2 fluid ounces per acre at 7-10 day intervals after the first application throughout the production season.

##### **CANTALOUPE, CUCUMBERS, MUSKMELON, WATERMELON, HONEYDEW, OKRA, AND SQUASH:**

1st Application - Apply 3.4 fluid ounces per acre when the third leaf begins to unfold.

2nd Application - Apply 3.4 fluid ounces per acre 2 weeks after the first application.

3rd Application - Apply 3.4 fluid ounces per acre 2 weeks after the second application.

For maximum yields, make continuous applications of 2.1 fluid ounces per acre at 7-10 day intervals after the first application throughout the growing season.

##### **EGGPLANT, PEPPER, AND TOMATO:**

1st Application - Apply 3.4 fluid ounces per acre when the plants have 3 true leaves.

2nd Application - Apply 3.4 fluid ounces per acre 2 weeks after the first application.

3rd Application - Apply 3.4 fluid ounces per acre 2 weeks after the second application.

For maximum yields and quality, make continuous applications of 0.8 fluid ounce per acre after the first application at 7-10 day intervals throughout the growing season.

##### **ONIONS:**

At planting: Apply 6.3 to 9.5 fluid ounces per acre, as an in-furrow or band application. Place as close to the seed as possible.

At first drip irrigation: Apply 6.3 to 9.5 fluid ounces per acre, maximizing contact with the seed. (Refer to the DRIP CHEMIGATION section under CHEMIGATION, for additional application directions.)



**SWEET CORN AND POPCORN:** Apply one, two, or all of the following applications.

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 <sup>2</sup> (fl. oz./acre)
30 inch	4.7 to 6.3
20 inch	7.0 to 9.5

AND/OR

Apply 3.4 fluid ounces per acre when the plants are in the 4-6 leaf stage.

AND/OR

Apply 3.4 fluid ounces per acre at the 8-10 leaf stage.

**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.

AND/OR

For foliar applications, apply according to *one* of the following schedules:

To increase tuber size number and promote better rooting:

1st Application - Apply 3.4 fluid ounces per acre at tuber initiation.

2nd Application - Apply 3.4 fluid ounces per acre 2-3 weeks after the first application.

The last application should be during tuber bulking.

OR

To enhance tuber size and uniformity:

1st Application - Apply 3.4 fluid ounces per acre at tuber initiation.

2nd Application - Apply 3.4 fluid ounces per acre at the onset of tuber bulking.

**CARROTS, PARSLEY, RADISHES, AND TURNIPS:**

1st Application - Apply 3.4 fluid ounces per acre when the plants have 3 true leaves.

2nd Application - Apply 3.4 fluid ounces per acre 2 weeks after the first application.

3rd Application - Apply 3.4 fluid ounces per acre 2 weeks after the second application.

**SWEET POTATOES AND YAMS: Apply according to one of the following schedules.**

At planting: Apply 16 to 32 fluid ounces of Ascend<sup>2</sup> per acre, in a transplant water solution.

OR

1st Application - Apply 0.2 to 0.4 fluid ounce per acre on a band just wide enough to cover all the plants seven to fourteen days after transplanting.

2nd Application - Apply 0.5 fluid ounce per acre in a band as above at twenty-eight days after transplanting.

3rd Application - Apply 0.1 fluid ounce per week along with a foliar fertilizer such as 15-5-5 at the rate of 32 fluid ounces or 1 quart per acre. Continue this program on a weekly basis until the potatoes have desirable harvest size.

**NOTE:** If seed has been treated with Ascend<sup>2</sup>, do not apply Ascend<sup>2</sup> as an in-furrow, band, side dress or mark out application.

**FOLIAR SPRAY PROGRAM FOR FRUIT CROPS****BANANAS:**

1st Application - Apply 3.1 to 6.3 fluid ounces per acre shortly prior to or at first bloom.

2nd Application - Apply 3.1 to 6.3 fluid ounces per acre two to three weeks after the first application.

**CITRUS (GRAPEFRUIT, LEMON, LIME, AND ORANGES):**

1st Application - Apply 3.1 to 6.3 fluid ounces per acre at first bloom.

2nd Application - Apply 3.1 to 6.3 fluid ounces per acre two to three weeks later.

If there is an extended bloom period, make additional applications at 3.1 to 6.3 fluid ounces per acre.

**GRAPES:**

1st Application - Apply 3.4 fluid ounces per acre shortly prior to or at bloom stage.

2nd Application - Apply 3.4 fluid ounces per acre 2 weeks after the first application.

**GUAVA AND PAPAYA:**

1st Application - Apply 3.4 fluid ounces per acre shortly prior to or at first bloom stage.

2nd Application - Apply 3.1 to 6.3 fluid ounces per acre 2 to 3 weeks after the first application.

**POME (APPLE, MAYHAW):**

Apply 6.3 fluid ounces per acre starting at pink bud stage and repeat every 7 to 10 days. Do not make more than 5 applications.

**STONE (PEACH, CHERRY, APRICOT, NECTARINE):**

Apply 6.3 fluid ounces per acre starting at pink bud stage and repeat every 7 to 10 days. Do not make more than 5 applications.

**STRAWBERRIES:**

1st Application - Apply 3.4 fluid ounces per acre shortly prior to or at first bloom stage.

2nd Application - Apply 3.4 fluid ounces per acre 2 weeks after the first application.

## SPRAY PROGRAM FOR FIELD CROPS

### ALFALFA: Established

- 1st Application - Apply 3.4 fluid ounces per acre upon dormancy break. Apply when sufficient re-growth is present.  
2nd Application - Apply 3.4 fluid ounces per acre after each cutting. Apply when sufficient re-growth is present.

### ALFALFA: Newly Seeded

- 1st Application - Apply 3.4 fluid ounces per acre when seedling alfalfa is in the 3<sup>rd</sup> to 4<sup>th</sup> trifoliate stage.

### CANOLA:

- 1st Application - Apply 3.4 fluid ounces per acre between the rosette stage and bolting.  
2nd Application - Apply 3.4 fluid ounces per acre at 20 percent bloom.  
3rd Application - Apply 3.4 fluid ounces per acre at early pod fill.

### COTTON - Non-Transgenic Varieties: Apply Ascend<sup>2</sup> according to one of the following schedules.

#### Schedule A:

- 1st Application - Apply 3.4 to 5.0 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.  
2nd Application - Apply 3.1 fluid ounces per acre at pinhead square. This can be applied in a tank mix that contains 4 fluid ounces per acre of Mepex<sup>®</sup> Plant Regulator brand of mequiat chloride (EPA Reg. No. 228-608).<sup>1)</sup>  
3rd Application - Apply 4.2 fluid ounces per acre at early bloom.

#### Schedule B:

- 1st Application - Apply 2.1 fluid ounces per acre on a band at the 3-7 leaf stage.  
2nd Application - Apply 3.1 fluid ounces per acre at the pinhead square stage. This can be applied in a tank mix that contains 4 fluid ounces per acre of Mepex<sup>®</sup> Plant Regulator brand of mequiat chloride (EPA Reg. No. 228-608).<sup>1)</sup>  
3rd Application - Apply 3.1 fluid ounces per acre at early bloom.

### COTTON - Transgenic Varieties:

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

- 1st Application - Apply 3.4 to 5.0 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.  
2nd Application - Apply 4.2 fluid ounces per acre at pinhead square. This can be applied in a tank mix that contains 4 fluid ounces per acre of Mepex<sup>®</sup> Plant Regulator brand of mequiat chloride (EPA Reg. No. 228-608).<sup>1)</sup>  
3rd Application - Repeat the above application at first bloom. If needed for vegetative growth control, repeat the above application at mid-bloom.

Higher rates and/or late season applications may be warranted under high stress conditions where square and/or boll retention is needed. During the bloom and post-bloom period, additional applications or higher rates can be applied but do not exceed a total of 25.5 fluid ounces per acre per season.

#### 1) TANK MIXING INFORMATION - Ascend<sup>2</sup> and Mepex

Perform a Compatibility Test for Mix Components before preparing the tank mix application. Read and follow the applicable Restrictions and Limitations and Directions for Use on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

#### Compatibility Test

Add components to a jar in the following sequence, using 1/2 teaspoon of Ascend<sup>2</sup> and 1/2 teaspoon of Mepex.

- 1) Water: For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Use only water from the intended source at the source temperature.
- 2) Ascend<sup>2</sup>, then Mepex: Cap the jar and invert 10 cycles.
- 3) Let the solution stand for 15 minutes.
- 4) Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. Do not use any spray solution that could clog spray nozzles.

#### Tank Mixing Order

- 1) Water: Begin by agitating a thoroughly clean sprayer tank half full of the required amount of clean water.
- 2) Ascend<sup>2</sup>, then Mepex
- 3) Remaining quantity of water

Only moderate agitation should be used while mixing and transporting.

### FIELD CORN: Apply one, two or all of the following applications.

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.

Row Spacing	Rate of Ascend <sup>2</sup> fl. oz./acre
30 inch	4.7 to 6.3
20 inch	7.0 to 9.5

AND/OR

Apply 6.7 to 10.8 fluid ounces per acre from the 3 leaf to the VT stage.

AND/OR

Apply 6.7 fluid ounces per acre between initial silking and brown silk.



**FIELD CORN CORN 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.

Row Spacing	Rate of Ascend <sup>2</sup> fl. oz./acre
30 inch	4.7 to 6.3
20 inch	7.0 to 9.5

**FLAX:**

- 1st Application - Apply 3.4 fluid ounces per acre when the plant is 2-4 inches tall.
- 2nd Application - Apply an additional 3.4 fluid ounces per acre two to three weeks later.

**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.

AND/OR

- 1st Application - Apply 3.4 fluid ounces per acre at the 3-5 leaf stage.
- 2nd Application - Apply 3.4 fluid ounces per acre after the 8th but before the 12th leaf stage.

**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.

AND/OR

- 1st Application - Apply 3.4 fluid ounces per acre at the 3-5 leaflet stage.
- 2nd Application - Apply 3.4 fluid ounces per acre at early flowering.
- 3rd Application - Apply 3.4 fluid ounces per acre at initial pegging.
- 4th Application - Apply 5.0 fluid ounces per acre during early pod fill.

**SOYBEANS:** Apply according to *one* of the following schedules.

- 1) Apply 3.4 fluid ounces per acre at the 3-5 trifoliate leaf stage.  
    Apply a second application of 3.4 fluid ounces between R1 and R3.
- 2) If the first application is missed, apply 6.7 fluid ounces per acre between R1 and R3.

**SUGAR BEETS:**

- In-Furrow or Mark Out:  
    Apply 4.7 to 6.3 fluid ounces per acre in-furrow or mark out.

AND/OR

- Foliar program:  
    1st Application - Apply 3.4 fluid ounces per acre between the 2<sup>nd</sup> and 10<sup>th</sup> true leaf stage.
- 2nd Application - Apply 3.4 fluid ounces per acre 2-3 weeks after the first application.

**SUGARCANE:**

- 1st Application - Use *one* of the following methods:  
    Apply 2.1 fluid ounces per acre in the furrow at planting.

OR

- Apply 3.4 fluid ounces per acre at the 2-3 leaf stage.
- 2nd Application - Apply 3.4 fluid ounces per acre one month after emergence. Additional Applications - Apply 3.4 fluid ounces per acre on monthly intervals throughout the production season for maximum benefit.

**SUNFLOWERS:**

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

AND/OR

- Apply 3.4 fluid ounces per acre at 4-true leaves.

AND/OR

- Apply an additional 3.4 fluid ounces per acre two to three weeks later.

**TOBACCO:**

- At planting: Apply 16 to 32 fluid ounces of Ascend<sup>2</sup> per acre, in a transplant water solution.

**WHEAT, BARLEY, OATS, AND RYE:** Apply according to *one* of the following schedules.

- 1) Apply 4.7 to 6.3 fluid ounces per acre in-furrow at planting.
- OR
- 2) If no at-planting application, apply 3.4 fluid ounces per acre prior to jointing. Apply 3.4 fluid ounces at the flag leaf stage.

## FOLIAR SPRAY PROGRAM FOR RICE

Ascend<sup>2</sup> should be applied at 3.4 fluid ounces per acre as a foliar spray to the plant during either one of the following stages of development.

**Primary Recommendations - 3 to 7 Leaf Stage:** This application must be made after the rice seedling has 3 fully emerged leaves and the 4th leaf is beginning to emerge, but before the seedling has completed development of 7 leaves or 3 tillers. This period for application generally begins about 3-6 weeks after seeding and ends 5-9 weeks after seeding. The duration of this period depends on the variety and the growing conditions. This application may be made in conjunction with corresponding herbicide applications.

**Alternate Recommendation - Two Millimeter (mm) Panicle Growth Stage:** If the primary application is missed, Ascend<sup>2</sup> can be applied to stimulate cell differentiation in the developing panicle. This application must be made when no more than 10% of the main culms are at the 2 mm panicle growth stage. The 2 mm panicle growth stage occurs immediately after internode elongation or joint movement has begun. Ascend<sup>2</sup> must be applied as soon as internode elongation is detected so the 2 mm panicle growth stage is not missed. It is better to apply slightly early than to apply late. **IMPORTANT:** Timing of the application at 2 mm growth stage is critical. Check the entire field for stage of plant development. Large fields may require split applications on upper and lower ends of the field to ensure proper timing throughout the field.

### SPECIAL NOTE FOR ALL TRANSPLANTED CROPS

Two methods are recommended for this program, unless otherwise directed for a specific crop or use:

A. Dip or spray roots with a solution of 0.8 fluid ounces of Ascend<sup>2</sup> per gallon of water prior to transplanting.

B. Bedding seedlings should 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<sup>2</sup> per gallon of water.

If applicable, begin the foliar program two (2) weeks after transplanting. A combination of the transplant and foliar spray program is most effective.

## 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:** Follow 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. UNOTHER 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.

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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.

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Ascend<sup>2</sup> is a trademark of Winfield Solutions, LLC

# Ascend<sup>2</sup>™

By WINFIELD  
UNITED

## Plant Growth Regulator

*Hormone compounds to stimulate plant growth.*



### ACTIVE INGREDIENTS

*Cytokinin, as Kinetin .....	0.012%
*Gibberellins (GA <sub>4</sub> + GA <sub>7</sub> ) .....	0.062%
*Indole-3-butyric Acid .....	0.103%

<b>OTHER INGREDIENTS</b> .....	<b>99.823%</b>
<b>TOTAL</b>	<b>100.000%</b>

\*Contains 0.004 oz. cytokinin, as kinetin/qt.

\*Contains 0.021 oz. gibberellins (GA<sub>4</sub> + GA<sub>7</sub>)/qt.

\*Contains 0.035 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> |
| <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</li></ul>                                 |

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

**HOTLINE NUMBER:** In case of medical emergency call 1-877-424- 7452.

**See inside booklet for additional precautionary statements,  
directions for use, warranty disclaimer and limitation of liability.**

**SHAKE WELL BEFORE USING.**

**NET CONTENTS: 2.5 GAL (9.46L)**

EPA Reg. No. 1381-273

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