

71771-3

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FEB 22 2010

Mr. Scott Thenell  
Regulatory Consultant  
Plant Health Care, Inc. c/o Thenell & Associates, LLC  
1181 Keaveny Court  
Walnut Creek, CA 94597-2465

Re: Plant Health Care, Inc.; ProAct®  
EPA Registration No. 71771-3  
Non-Fast Track Label Amendment  
Original Application Dated 09/03/2009  
Decision #419876

Dear Mr. Thenell:

The Agency has reviewed your request to amend the subject product registration, which included the following changes to the product label:

**I. SECTION A**

- 1) Correction of minor formatting and typographical errors.
- 2) Addition of an alternate brand name (i.e., Employ® H & T) and a tag line (i.e., "Enhances growth").
- 3) Update to Plant Health Care, Incorporated's address.
- 4) Removal of the following phrase from the Personal Protective Equipment section: "Dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95, when mixing" (supported by Master Record Identification Number [MRID No.] 478479-01).
- 5) Revision of certain statements in the Product Information, General Instructions, Use Precautions, Mixing Instructions, Application Instructions, and Warranty and Disclaimer sections for certain horticultural and turf uses not subject to the Worker Protection Standard (WPS).
- 6) Removal of "General" from "Use Precautions" so as not to imply the statements associated with this section are advisory.
- 7) Removal or replacement of "recommendations," "recommended," and "recommend" in the Application Instructions section.
- 8) Replacement of "Container Disposal" with "Container Handling" and "may" with "must" within the Storage and Disposal box.
- 9) Clarification of a statement in the Warranty and Disclaimer section.

CONCURRENCES

SYMBOL	7511P	7511P	7511P				
SURNAME	KAUSCH	Reynolds	Andy				
DATE	02/18/2010	2/18/10	2/22/10				

## II. SECTION B

- 1) Correction of minor formatting and typographical errors.
- 2) Update to Plant Health Care, Incorporated's address.
- 3) Addition of certain WPS statements and precautions (i.e., personal protective equipment, user safety requirements, user safety recommendations, State and Tribal referral statement, and application restrictions statement) per Supplement G, Section III of Pesticide Registration (PR) Notice 93-11.
- 4) Removal of "General" from "Use Precautions" so as not to imply the statements associated with this section are advisory.
- 5) Modification of the statements in the Use Promptly section to the following:  
"Use product within 24 hours after it is mixed with water and use opened packets within 3 weeks. Reseal opened packets to minimize exposure to air and moisture" (supported by MRID No. 479538-01).
- 6) Clarification of certain statements and some information provided in the Mixing Instructions, Application Instructions, Crops and Application Rates, and Warranty and Disclaimer sections.
- 7) Replacement of "Container Disposal" with "Container Handling" and "may" with "must" within the Storage and Disposal box.
- 8) Modification of the last statement under the Pesticide Storage subheading within the Storage and Disposal box to the following: "Use product within 3 weeks of opening and within 24 hours after mixing" (supported by MRID No. 479538-01).

## III. SECTION C

- 1) Correction of minor formatting and typographical errors.
- 2) Update to Plant Health Care, Incorporated's address.
- 3) Removal of the following phrase from the Personal Protective Equipment section:  
"Dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95, when mixing" (supported by MRID No. 478479-01).
- 4) Addition of nurseries as a use site.
- 5) Removal of "General" from "Use Precautions" so as not to imply the statements associated with this section are advisory.
- 6) Replacement of "Container Disposal" with "Container Handling" and "may" with "must" within the Storage and Disposal box.
- 7) Clarification of a statement in the Warranty and Disclaimer section.

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Mr. Scott Thenell  
EPA Registration Number 71771-3

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#### IV. SECTION D

- 1) Correction of minor formatting and typographical errors.
- 2) Replacement of "Inert" with "Other" in the Ingredient Statement per PR Notice 97-6.
- 3) Update to Plant Health Care, Incorporated's address.
- 4) Adjustment of the Environmental Hazards statements per PR Notice 2008-1.

The changes referred to above, submitted in connection with registration under Section 3(c)(5) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), are acceptable provided that you submit two (2) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for further description of a final printed label.

Your release for shipment of the product bearing the amended labeling constitutes acceptance of this condition. If you have any questions, contact Ms. Jeannine Kausch at 703-347-8920 or by email at [kausch.jeannine@epa.gov](mailto:kausch.jeannine@epa.gov).

Copies of the associated science reviews, as well as a stamped copy of the label, are enclosed for your records.

Sincerely,



Sheryl K. Reilly, Ph.D., Chief  
Microbial Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511P)

Enclosures (4):

- A-79 Enclosure
- Acceptable Label
- Review of MRID No. 478479-01 (J.V. Gagliardi and J.L. Kough to J. Kausch; dated 11/24/2009)
- Review of MRID No. 479538-01 (J.V. Gagliardi and J.L. Kough to J. Kausch; dated 02/16/2010)

# ProAct Master Label Index

Section A: ..... Agricultural Use  
 Section B: ..... Commercial Seed Treatment  
 Section C: ..... Pre-plant Seed Treatment  
 Section D: ..... Non-Agricultural Use

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## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Harmful if inhaled. Avoid breathing spray mist. Remove and wash contaminated clothing before reuse.

#### Section A: Agricultural Use

# ProAct®

[Alternate Brandname: EMPLOY®, PHC-575, EMPLOY® H&T]

A Biochemical Pesticide [OPTIONAL TEXT: for foliar use] that:

[OPTIONAL TAG LINES - For use individually or in combination on labels: Is especially formulated for row crops; Improves stand establishment; Improves standability; Decreases lodging; Increases plant stamina and vigor; Plant Health Regulator; Plant Health Promoter; Suppresses nematode egg production; Enhances crop growth, quality, and yield; Enhances growth; Aids in management of post-harvest diseases; Reduces Tobacco Specific Nitrosamines (TSNAS); Reduces transplant shock; Harp-N-Tek™ *inside* [LOGO]; Harp-N-Tek is Plant Health Care's trademark for its proprietary harpin protein technology; Extends post-harvest shelf life and salability; Extends post-harvest shelf life and salability of head lettuce; Extends post-harvest shelf life and salability of leaf lettuce; Extends post-harvest shelf life and salability of spinach; Extends post-harvest shelf life and salability of leafy vegetables.]

#### Wettable Dry Granule

#### ACTIVE INGREDIENT:

Harpinαβ Protein: ..... 1.0%

OTHER INGREDIENTS: ..... 99.0%

Total: ..... 100.0%

EPA Reg. No. 71771-3

EPA Est. No. 71771-PA-001

**KEEP OUT OF REACH OF CHILDREN**

### CAUTION PRECAUCION

See additional precautionary statements elsewhere on the label.

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle (If you do not understand the label, find someone to explain it to you.)

#### Net Weight:

**PLANT HEALTH CARE, INC.**  
 265 Kappa Drive, Pittsburgh, PA 15238  
 1-800-421-9051 • www.planthealthcare.com

Read the entire label before using this product.

Read WARRANTY AND DISCLAIMER before buying or using. If terms are not acceptable, return at once unopened.

# ACCEPTED

## FEB 22 2010

**Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under**

ProAct MASTER LABEL NO. 71771-3 (Ag) - Revision dated February 17, 2010  
EPA Reg. No. 71771-3 71771-3

FIRST AID	
if inhaled:	<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 center or doctor for further treatment advice.</li> </ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Pesticide Information Center at 1-800-858-7378 for emergency medical treatment information.	

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Shoes and socks.

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

#### Engineering Controls

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.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided PPE specified above for "applicators and handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

USER SAFETY RECOMMENDATIONS
<ul style="list-style-type: none"> <li>• Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.</li> <li>• Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.</li> <li>• Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.</li> </ul>

#### 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 when cleaning equipment or disposing of equipment wash waters or rinsate.

#### 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 of application. For any requirement specific to your State or Tribal jurisdiction, consult the State or Tribal agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box 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 restricted-entry interval (REI) of 4 hours.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plant, soil, or water) is:

- Coveralls;
- Waterproof gloves; and
- Shoes and socks.

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

### PRODUCT INFORMATION

ProAct stimulates the plant's natural growth and defense systems, enhancing overall plant health. [ALTERNATE TEXT: ProAct stimulates the natural growth and defense systems of crops, enhancing overall plant health.] Healthier plants exhibit increased plant stamina and vigor, leading to one or more of the following benefits: increased plant growth, improved stand, suppression of nematode egg production, increased marketable yield, enhanced quality, extended shelf life, and improved transplant recovery.

ProAct is a tool for use in Integrated Crop Management (ICM). [ALTERNATE TEXT: ProAct is a tool for use in Integrated Landscape Management.] It has no direct killing effect on pests. Product efficacy is based on its ability to activate the plant's own internal defense and growth mechanisms. ProAct works best when used in conjunction with good crop management practices. [ALTERNATE TEXT: ProAct works best when used in conjunction with good landscape management practices.]

### GENERAL INSTRUCTIONS

#### NEMATODE EGG SUPPRESSION AND PLANT GROWTH

ProAct can be used to suppress nematode egg production while improving plant and root growth. ProAct offers a different mode of action for nematode suppression. Use of a labeled pre-plant application of a soil fumigant, contact nematicide, or nematocidal seed treatment is typically needed for nematode suppression in most crops. [ALTERNATE TEXT: Use of a labeled pre-plant application of a soil fumigant, contact nematicide, or nematocidal seed treatment is suggested for nematode management in most situations.] Apply ProAct for supplemental suppression of nematode egg production.

### GROWTH ENHANCEMENT AND MARKETABLE YIELD

Use ProAct to overcome transplant shock, enhance plant growth and quality, mend rhizomatous turf types, and increase plant health and vigor to assist in the management of certain diseases and to enhance crop quality and marketable production.

### POST HARVEST BENEFITS

Use ProAct to extend shelf life and overcome transplant shock through pre-harvest applications. [ALTERNATE TEXT: Use ProAct to extend post-harvest shelf life and salability of head lettuce. Use ProAct to extend post-harvest shelf life and salability of leaf lettuce. Use ProAct to extend post-harvest shelf life and salability of spinach. Use ProAct to extend post-harvest shelf life and salability of leafy vegetables. Use ProAct to extend post-harvest shelf life and salability.]

### SITES

Use ProAct for greenhouse, shadehouse, nursery, and field production of all plants listed on this label. [ALTERNATE TEXT: Use ProAct on plants in ornamental gardens, athletic fields, parks, golf courses, and public or private lawns and gardens, and that are intended for aesthetic purposes or climatic modification.]

### COVERAGE

Use spray volume adequate to obtain coverage without runoff. Uniform or full leaf coverage is helpful but is not required.

### DAYS TO HARVEST

ProAct can be applied up to the day of harvest.

### USE PRECAUTIONS

#### USE PROMPTLY

Use product on the same day it is mixed with water. Carefully reseal opened packages to minimize exposure to air and moisture. Use opened packages within 3 weeks.

#### TANK MIXING

Use in Mixtures: ProAct is believed to be compatible with most other labeled pesticides, such as post-emergence herbicides, insecticides, acaricides, and fungicides, as well as most foliar nutritional products. To determine the physical compatibility of this product with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add dry flowables first, then flowables, and then emulsifiable concentrates last. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding products to the spray tank. Do not mix this product with any other product containing a label prohibition against such mixing. When tank-mixing ProAct with any other approved pesticide, always read and follow all use directions, restrictions, and precautions of both ProAct and the tank mix partner(s). The resulting tank mix must be used in accordance with the most restrictive label limitations and precautions. Do not exceed label dosage rates. [ALTERNATE TEXT: If ProAct cannot be put in the tank first, before adding it to the tank, slurry the ProAct in a small amount of clean water and add the slurry to the tank.]

**Glyphosate Herbicides:** When tank mixing ProAct with glyphosate for application on crops designated Roundup Ready®, only use formulations of glyphosate herbicide that are fully labeled for use on Roundup Ready® crops. Never spray this mixture on crops that are not designated Roundup Ready® as severe injury or death of the crop can occur. Some glyphosate formulations allow for the addition of surfactants. Please refer to the surfactant recommendations from the manufacturer.

**Precautions:** Do not use ProAct in tank mixes or water below pH 5 or above pH 10. Do not mix this product with pyrophosphates, phosphoric acid, or other strong oxidizers.

**Surfactants:** Use only non-ionic adjuvants approved for use on growing crops.

#### [OPTIONAL TEXT: DILUTION WATER QUALITY

If dilution water is high in total mineral content, salinity, suspended solids and/or exhibits any other factors that reduce the solubility of ProAct, then first dissolve ProAct in an appropriate volume of "clean

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water" such as municipal tap water. Pour dissolved ProAct solution into the dilution water for the spray. (See step 1 of "Mixing Instructions").]

#### [OPTIONAL TEXT: DILUTION WATER QUANTITY

If one ounce of ProAct is diluted in more than 35 gallons of chlorinated water (e.g., municipal water), add a labeled water treatment product to remove excess chlorine before adding ProAct. Consult your Plant Health Care representative if you need further directions on water treatment.]

#### CROP RIPENING

Crop maturity can infrequently differ in crops treated with ProAct. User must monitor crop for maturity and harvest accordingly.

#### RAIN

Do not apply during rain. Reapplication is not necessary if the spray has dried before rain begins.

#### STRESSED PLANTS

Plants must be actively growing at the time of foliar applications. Applications made to plants that are stressed by extreme heat, cold, moisture, or nutrient deficiency can be less effective.

#### SPRAY DRIFT

Avoiding spray drift at the application site is the responsibility of the applicator. The interactions of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering these factors when making decisions.

### MIXING INSTRUCTIONS

- Step 1. Fill at least one-half of the mix tank with clean water. Provide gentle agitation.
- Step 2. [OPTIONAL TEXT: If using less than 1 ounce of ProAct per 35 gallons of chlorinated water, add water treatment agent and continue gentle agitation (See Use Precautions on "Dilution Water Quantity").]
- Step 3. [OPTIONAL TEXT: If dilution water quality is suspect, dissolve ProAct in clean water before adding to the mix tank (see Use Precautions on "Dilution Water Quality"). Add the required amount of ProAct.] Agitate until dissolved and avoid excessive foaming.
- Step 4. If tank mixing, add other materials to the mix tank. Add remaining water to mix tank.
- Step 5. Continue gentle agitation and apply promptly.

### APPLICATION INSTRUCTIONS

Apply ProAct as a pre-transplant foliar, root dip, or as a foliar application, including pre-harvest foliar applications for post-harvest benefits. [ALTERNATE TEXT: Apply ProAct as a pre-transplant root dip or as a foliar application.]

**Pre-plant Dip:** Apply as a pre-plant foliar or root dip to vegetable, cucurbit and cole crops, ornamentals, tobacco, and small fruit crops at the rate of 1 – 9 oz per 100 gallons of water immediately prior to transplanting. [ALTERNATE TEXT: Apply as a pre-plant foliar or root dip to bare root ornamentals at the rate of 3 – 9 oz per 100 gallons of water immediately prior to transplanting.] Completely immerse planting stock in solution. DO NOT reuse water solution. [OPTIONAL TEXT: Wash transplants to remove excess soil prior to dipping.] Dip, soak, or expose plants for a minimum of 2 to 5 minutes. Dispose of dip solution according to local restrictions. Plant treated plants as quickly as possible. For continued crop management, follow with foliar applications of ProAct as specified in the tables that follow. [ALTERNATE TEXT: For continued plant management, follow with foliar applications of ProAct as specified in the sections that follow.]

**Foliar Application:** Apply ProAct as a greenhouse or field application using conventional ground or aerial equipment. Use ProAct to enhance plant growth and vigor and to increase marketable production; and as part of an IPM program to assist disease management and obtain post-harvest benefits.

#### [ALTERNATE TEXT]

- **LANDSCAPE PLANTS**, such as broadleaf and coniferous trees, fruit trees, palms, vines, shrubs, brambles, berries, ground covers, perennials, and annual ornamental plants: Apply 2 oz. per 50 gallons of water once per month during the growing season.
- **TURF**, such as public and private lawns and grounds, golf courses and greens, athletic fields, and parks: Apply 2 oz per acre once per month during the growing season. If using more than 70 gallons per acre of chlorinated water (e.g., municipal water), add a labeled water de-chlorinator before adding ProAct.]

#### Application via Sprinkler or Drip (Trickle) Chemigation Systems:

**General Statements:** Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move; and drip (trickle) irrigations systems. Do not apply this product through any other type of irrigation system. Crop injury and lack of effectiveness in the crop can result from non-uniform distribution of treated water. If you have questions about your system's 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. A person knowledgeable about the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

**Sprinkler Chemigation System Requirements:** 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 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 that 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. Do not apply when wind speed favors drift beyond the area intended for treatment. Apply product continuously for the duration of the water application.

**Drip (Trickle) Chemigation System Requirements:** 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 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 that 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. Apply product continuously for the duration of the water application.

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Use the following tables to make decisions on application rates and timing. Follow applicable specifications for your crop.

**Nematode Suppression**

Use ProAct for supplemental suppression of nematodes. Use ProAct in conjunction with other nematode management practices. Use rates are specified beside each crop or crop grouping in tables below.	
Crop	Use Instructions
<b>DIRECT-SEEDED CROPS</b>	In Field: Use ProAct following a pre-plant application of soil fumigant, contact nematicide, or nematicidal seed treatment, if available. Make first foliar application of ProAct at 2 - 3 weeks after plant emergence. Re-apply as specified in tables below.
<b>TRANSPLANTED CROPS</b>	Use ProAct following a pre-plant application of soil fumigant, contact nematicide, or nematicidal seed treatment, if available.  Pre-plant: Apply ProAct as a pre-plant foliar or root dip at the rate of 3 - 9 oz per 100 gallons of water immediately prior to transplanting.  In Field: Make first foliar application of ProAct at 2 - 3 weeks after transplanting. Re-apply as specified in tables below.
<b>PERENNIAL CROPS</b>	In Field: Use ProAct following a pre-plant application of soil fumigant, contact nematicide, or nematicidal seed treatment, if available. Make first application after plants break dormancy and begin root growth. Re-apply as specified in tables below.

**Greenhouse and Transplant Applications**

Use Site & Crop	Rate	Timing
Greenhouse: Any Crop Listed Elsewhere on this Label	1-9 oz per 100 gal water	Apply overhead applications after seedling emergence. Repeat every 14 - 21 days.
Transplant: Any Crop Listed Elsewhere on this Label	1-9 oz per 100 gal water	Apply 5 - 7 days before transplanting. Can also be applied as a plant drench at transplanting.

**Vegetable and Other Crops**

Crop	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing
<b>PERENNIAL VEGETABLES</b> Artichoke Globe Artichoke Asparagus	1 - 9	10 - 200 by ground. Minimum 3 by air.	Apply as a foliar spray at 14 day intervals beginning at new growth. [ALTERNATE TEXT: Begin applications when new growth starts in spring. Repeat at 21 - 28 day intervals as needed.]
<b>TUBER CROPS</b>			Apply at tuber initiation. Repeat applications as needed every 21 - 28 days.
<b>VEGETABLES</b> Bulb, Root, Leafy, Cole Crop, Fruiting, Cucurbit, Okra, Legume			Begin applications at first new growth and repeat at 14 day intervals. [ALTERNATE TEXT: Begin applications prior to first bloom. Repeat applications at 21 - 28 day intervals. For direct-seeded plants, begin at first true leaf.]
<b>SWEET CORN</b> (fresh or seed)	0.5 - 9	10 - 200 by ground. Minimum 3 by air.	Apply at 14 day intervals beginning at first new growth. [ALTERNATE TEXT: Make 1 - 2 applications before tassels present.]

**Field Crops**

Crop	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing
<b>LEGUMES</b>	0.5 - 9	5 - 200 by ground. Minimum 3 by air.	Apply at 14 day intervals beginning at first new growth. [ALTERNATE TIMING: Apply after complete emergence. Repeat at 21 - 28 day intervals as needed.]
<b>COTTON</b>			Apply at first true leaf, first bloom, and 21 days after first bloom to boost overall growth and production. For suppression of pests, apply ProAct prior to infestation and continue at 14 day intervals. [ALTERNATE TEXT: Apply between 2 leaf stage and mid-bloom.]
<b>FORAGE CROPS</b> (Grass, Hay, Non-grass)			Apply at 14 day intervals beginning after new growth commences and at cutting. [ALTERNATE TEXT: Apply after new growth commences and at each cutting. For newly seeded crops, begin at first true leaf.]
<b>CORN</b> (grain, silage, seed or popcorn)			Apply at 14 day intervals beginning at new growth. [ALTERNATE TEXT: Apply after complete emergence during vegetative growth phase.]
<b>OIL AND SEED CROPS</b> Flax			Begin applications at new growth, followed at 14 day intervals through harvest. [ALTERNATE TEXT: Apply after complete emergence during vegetative growth phase.]
<b>ROOT CROPS</b>			Apply at 14 day intervals beginning at new growth. [ALTERNATE TEXT: Apply after complete emergence during vegetative growth phase.]
<b>RICE SMALL GRAINS SORGHUM</b>	Apply at 14 day intervals beginning at new growth. Apply as needed for wheat sheath blight. [ALTERNATE TEXT: Apply after complete emergence during vegetative growth phase.]		
<b>SUGARCANE</b>	Apply after new growth commences. Repeat at 28 - 35 day intervals as needed.		

**Tobacco**

Crop	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing
<b>TOBACCO</b> All types	1 - 13	10 - 200 by ground. Minimum 3 by air.	Apply at 14 day intervals beginning 7 days after transplanting through harvest. [ALTERNATE TEXT: Begin applications when plants are established. Repeat at 21 - 28 day intervals as needed.]

**Berries and Small Fruit**

Crop	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing
<b>BERRIES AND SMALL FRUIT</b> All Types	1 - 13	10 - 200 by ground. Minimum 3 by air.	Apply at 14 day intervals while plants are actively growing, beginning in the greenhouse or nursery, and after transplanting, as appropriate. For fall transplanted strawberries, resume applications in spring. [ALTERNATE TEXT: Begin applications when plants are

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ished or 14 days after full emergence. Repeat at 21 - 28 day intervals as needed.]

**Trees and Vines**

Crop	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing
AVOCADO	1 - 13	10 - 200 by ground. Minimum 3 by air.	Apply at 14 day intervals beginning at new growth. [ALTERNATE TEXT: Apply at 21 - 35 day intervals beginning before bloom initiation.]
CITRUS			Apply at 14 day intervals beginning at new growth. [ALTERNATE TEXT: Apply at 21 - 35 day intervals beginning before bloom initiation.]
NUT TREES			Apply at 14 day intervals beginning at new growth. [ALTERNATE TEXT: Apply at 21 - 35 day intervals beginning before bloom initiation.]
POME FRUIT Apple, pear STONE FRUIT			Apply 2 pre-bloom sprays beginning at new growth and again 7 - 10 days later, followed by post-bloom sprays at 14 day intervals. [ALTERNATE TEXT: Apply at 21 - 35 day intervals beginning before bloom initiation.] For peaches, apply at pit hardening and again 21 days later.
VINE CROPS Grape (juice, raisin, table, and wine) Kiwifruit Hops			10 - 200 by ground. Minimum 3 by air.
TREES Conifer Broadleaf	10 - 200 by ground. Minimum 3 by air.	Apply beginning after complete emergence.	

**Turf and Ornamentals**

Crop	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing
TURF GRASSES - All types	1 - 8	10 - 200 by ground. Minimum 3 by air.	Begin applications when plants are established or 14 days after full emergence. Repeat at 28 - 35 day intervals as needed.
ORNAMENTALS	1 - 9	10 - 200 by ground. Minimum 3 by air.	Apply at 14 - 17 day intervals once plants have initiated bud/leaf, fully leaved out, or beginning 7 days after transplant and/or potting/repotting. For roses, begin applications 7 days after grafted cuttings are planted and continuing at 14 - 17 day intervals. [ALTERNATE TEXT: Begin applications prior to first bloom. Repeat at 21 - 28 day intervals or as needed.]

**Specialty Crops**

Crop	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing
ALOE BANANA COFFEE FIGS HERBS - All types MANGO PAPAYA PINEAPPLE TARO ROOT	1 - 13	10 - 200 by ground. Minimum 3 by air.	Apply at 21 - 28 day intervals beginning 7 days after new growth/new spring growth is initiated.

**Grasses Grown For Seed**

Crop	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing
TURF GRASSES, FORAGE GRASSES	0.5 - 9	10 - 200 by ground. Minimum 3 by air.	Apply at 14 day intervals beginning 14 days after full emergence.

**Pre-Harvest Applications for Post-Harvest Benefits**

Crop	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing
Any Crop Listed Elsewhere on this Label	1 - 10	20 - 200 by ground. Minimum 3 by air.	Apply 1 - 14 days before harvest. Use higher rates if no previous applications have been made.

**Foliar Nutrient Applications**

Crop	Rate (Oz/Acre)	Dilution (Gal/Acre)	Timing and Use with Foliar Fertilizer
Any Crop Listed Elsewhere on this Label	1 - 4	5 - 200 by ground. Minimum 3 by air.	Apply with foliar fertilizer applications at a rate of 1 oz ProAct per 5 lbs. foliar fertilizer.

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE**

Keep product away from exposure to air, sunlight, moisture, or heat. Do not store in temperatures over 110°F for more than seven days. Use product within 3 weeks of opening and the same day as mixing.

**PESTICIDE DISPOSAL**

Wastes resulting from use of this product must be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING**

Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment, then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.



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## WARRANTY AND DISCLAIMER

### CONDITIONS OF SALE AND EXCLUSIVE WARRANTY

The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop [ALTERNATE TEXT: Plant] injury, ineffectiveness of the product, or other unintended consequences may result because of such factors as horticultural practices, use with other products (unless otherwise expressly provided in the Directions for Use of this product), presence of other materials, the manner of use or application, and various environmental conditions, including but not limited to weather conditions and moisture conditions. To the extent consistent with applicable law, all of the aforementioned risks are beyond the control of Plant Health Care, Inc. and the Buyer shall assume all such risks.

### EXCLUSIVE WARRANTIES

Plant Health Care, Inc. warrants that at the time of first sale of this product it conforms to the chemical description on the label and under normal conditions is reasonable fit for the purposes referred to in the Directions for Use, subject to inherent risks referred to above. To the extent consistent with applicable law, if this product does not perform as warranted above, customer's sole remedy for breach of that warranty shall be replacement of the product or refund of the purchase price paid, at the option of Plant Health Care, Inc. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, TERMS, OR CONDITIONS EXPRESSED OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO WARRANTIES, TERMS, OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND SATISFACTORY QUALITY.

### LIMITATION OF LIABILITY

To the extent consistent with applicable law, Plant Health Care, Inc. excludes for itself and its suppliers any liability, whether based in contract or tort (including negligence), for incidental, consequential, indirect, special, or punitive damages of any kind, or for loss of revenue or profits, loss of business, or crop [ALTERNATE TEXT: plant] injury arising out of or in connection with the sale, use, injury, performance, or failure of this product, even if Plant Health Care, Inc. or its authorized reseller has been advised of the possibility of such damages, and limits its liability to replacement of the product or a refund of the purchase price paid, at the option of Plant Health Care, Inc. This disclaimer of liability for damages will not be affected if any remedy provided herein fails of its essential purpose.

### ASSUMPTION OF RISK

To the extent consistent with applicable law, Buyer and Users of this product assume the risk of any use contrary to the Directions for Use and/or all of the risks inherent in the use of the product as set forth above. Plant Health Care, Inc. offers this product, and the Buyer and User accept it, subject to the foregoing Conditions of Sale and Exclusive Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of Plant Health Care, Inc.

### PROMPT NOTICE OF CLAIM

Plant Health Care, Inc. must have prompt notice as soon as Buyer or User has reason to believe they may have a claim (not to exceed twenty-one days from the date of application) so that an inspection of the affected property and growing crops [ALTERNATE TEXT: plants] may be made. To the extent consistent with applicable law, unless Buyer and Users promptly notify Plant Health Care, Inc. of any claims, they shall be barred from obtaining any remedy.

### TANK MIXES

To the extent consistent with applicable law, tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of User, Applicator, and/or Application Advisor. Read and follow the entire label of each product to be used in a tank mix with this product.

### LIMITED USE LICENSE AND PATENTS

The contents of this package and/or the use of the contents are covered by U.S. Patent Nos. 5,849,868, 5,859,324, 5,776,889, 5,977,060, and 6,277,814 as well as pending patent applications. The purchase of this package grants the Buyer a license, under these patents and patent applications, to use its contents only for treating plants, plant seeds, and other plant parts as described herein.

© 2010 Plant Health Care, Inc. ProAct® is a registered trademark of Plant Health Care, Inc. Always read and follow label instructions before buying or using this product. Roundup Ready® is a registered trademark of Monsanto Technology LLC.

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# ProAct®

[Alternate Brandname: N-Hibit Gold CST™]

## Seed Treatment

[OPTIONAL TAG LINES – For use individually or in combination on labels: A biochemical pesticide seed treatment for yield enhancement; Improves standability; Decreases lodging; Increases plant stamina and vigor; Plant Health Regulator; Plant Health Promoter; Activates plant growth and defense systems; Suppresses nematode egg production; Increases Root Mass, Enhances plant health; Facilitates Integrated Pest Management Programs; Harp-N-Tek™ *inside* [LOGO]; Harp-N-Tek is Plant Health Care's trademark for its proprietary harpin protein technology]

### FOR USE ONLY BY COMMERCIAL SEED TREATMENT FACILITIES

#### Wettable Dry Granule

**ACTIVE INGREDIENT:**

Harpinaβ Protein: ..... 1.0%

**OTHER INGREDIENTS:** ..... 99.0%

Total: ..... 100.0%

EPA Reg. No. 71771-3

EPA Est. No. 71771-PA-001

**KEEP OUT OF REACH OF CHILDREN**

### CAUTION

See additional precautionary statements elsewhere on the label.

**Net Weight:**

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285 Kappa Drive, Pittsburgh, PA 15238  
1-800-421-9051 • www.planthealthcare.com

Read the entire label before using this product.

Read WARRANTY AND DISCLAIMER before buying or using. If terms are not acceptable, return at once unopened.

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### CAUTION

Harmful if inhaled. Avoid breathing spray mist. Remove and wash contaminated clothing before reuse.

FIRST AID	
If Inhaled:	<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 center or doctor for further treatment advice.</li> </ul>

#### IOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Pesticide Information Center at 1-800-858-7378 for emergency medical treatment information.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Shoes and socks.

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

#### USER SAFETY RECOMMENDATIONS

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

#### 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 requirement specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

#### GENERAL INSTRUCTIONS

##### GROWTH ENHANCEMENT

Use ProAct to increase plant health and vigor, suppress nematode egg production, increase root mass and to enhance crop quality and production.

#### USE PRECAUTIONS

##### COLORING

Note: This product does not contain dye. Seed treated commercially with this product must be colored with an EPA-approved dye. Treated seed must be labeled in accordance with requirements of the Federal Seed Act.

##### MIXING WITH OTHER SEED TREATMENT PRODUCTS

Read and follow the entire label of each product to be used in combination with this product. ProAct is believed to be compatible with most other labeled pesticides. To determine the physical compatibility of this product with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add dry flowables first, then flowables, and then emulsifiable concentrates last. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding products to the seed treatment equipment.

##### USE PROMPTLY

Use product within 24 hours after it is mixed with water and use opened packages within 3 weeks. Reseal opened packages to minimize exposure to air and moisture.

## MIXING INSTRUCTIONS

Mix ProAct as follows:

- Step 1.** Mix the required amount of ProAct with water or other water-based materials directly into the mix tank, or initially in a separate container, and provide agitation.
- Step 2.** Agitate until dissolved and avoid excessive foaming.
- Step 3.** When tank mixing, add other materials to the mix tank in the order determined appropriate based on compatibility testing.
- Step 4.** Continue to agitate until dissolved and avoid excessive foaming.
- Step 5.** Promptly apply seed treatment mixture to seed.

### MIXING WITH DYE OR COLORANT

Include an EPA-approved dye or colorant with this product. Follow any specific requirement for mixing order of the EPA-approved dye or colorant on the label of any of the other products to be added to the mixture.

## APPLICATION INSTRUCTIONS

Apply ProAct commercial seed treatment to seed using application rates specified for the crops listed below. Mix ProAct with other commercial seed treatments, as needed, unless specifically prohibited on labeling of other products in the mixture or if the mixture fails the compatibility jar test. Use of the resulting mix must be in accordance with the most restrictive label limitations and precautions on any of the products in the mixture. Allow treated seeds to dry before bagging.

### CROPS AND APPLICATION RATES

#### Vegetable, Cucurbit, Cole and Other Crops

Crop	Rate
BULB VEGETABLES FRUITING VEGETABLES CUCURBITS LEAFY AND COLE CROPS SWEET CORN	0.1 – 5 oz per 100 lbs seed

#### Field Crops

Crop	Rate
CORN Grain, Silage, Seed, and Popcorn COTTON FORAGE CROPS LEGUME VEGETABLES LEGUMES, FRESH and WET PROCESSING VEGETABLES OIL and OIL-SEED CROPS PEANUT ROOT CROPS SORGHUM TUBER CROPS	0.1 – 5 oz per 100 lbs seed

#### Small Grain Crops

Crop	Rate
RICE SMALL GRAINS	0.1 – 5 oz per 100 lbs seed

#### Tobacco

Crop	Rate
TOBACCO – All types	0.1 – 5 oz per 100 lbs seed

#### Berries and Small Fruit

Crop	Rate
BERRIES AND SMALL FRUIT – All types	0.1 – 5 oz per 100 lbs seed

#### Trees and Vines

Crop	Rate
AVOCADO CITRUS NUT TREES POME FRUIT STONE FRUIT VINE CROPS TREES Conifer Broadleaf	0.1 – 5 oz per 100 lbs seed

#### Turf and Ornamentals

Crop	Rate
TURF GRASS ORNAMENTALS (Bulbs, Seeds or Tubers) – All types	0.1 – 5 oz per 100 lbs seed

#### Specialty Crops

Crop	Rate
ALOE BANANA COFFEE FIGS HERBS MANGO PAPAYA PINEAPPLE TARO ROOT	0.1 – 5 oz per 100 lbs seed

#### Grasses Grown For Seed

Crop	Rate
TURF GRASSES FORAGE GRASSES	0.1 – 5 oz per 100 lbs seed

#### ALTERNATE TEXT:

Crop	Rate
LEEK, ONION	2 – 4 oz per 100 lbs seed
LETTUCE, SPINACH, FENNEL	2 – 4 oz per 100 lbs seed
BROCCOLI, CABBAGE, CAULIFLOWER, CHINESE CABBAGE	2 – 4 oz per 100 lbs seed
DRY BEAN, GARDEN BEAN, PEA	0.25 – 1 oz per 100 lbs seed
CUCUMBER, EDIBLE GOURD, MELON, PUMPKIN, SQUASH, WATERMELON	2 – 4 oz per 100 lbs seed
EGGPLANT, HOT PEPPER, OKRA, SWEET PEPPER, TOMATO, TOMATO SEED FOR ROOTSTOCK PRODUCTION	2 – 4 oz per 100 lbs seed
CARROT, RADISH	2 – 4 oz per 100 lbs seed
SWEET CORN	0.75 oz per 100 lbs seed

#### Field Crops

Crop	Rate
CANOLA	2 – 4 oz per 100 lbs seed
CORN INCLUDING GRAIN, SILAGE, SEED AND POPCORN	0.1 – 1 oz per 100 lbs seed
COTTON	1 – 4 oz per 100 lbs seed
SOYBEAN	0.1 – 1 oz per 100 lbs seed

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## STORAGE AND DISPOSAL

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

### PESTICIDE STORAGE

Keep product away from exposure to air, sunlight, moisture, or heat. Do not store in temperatures over 110°F for more than seven days. Use product within 3 weeks of opening and within 24 hours after mixing.

### PESTICIDE DISPOSAL

Wastes resulting from use of this product must be disposed of on site or at an approved waste disposal facility.

### CONTAINER HANDLING

Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment, then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## WARRANTY AND DISCLAIMER

### CONDITIONS OF SALE AND EXCLUSIVE WARRANTY

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### LIMITATION OF LIABILITY

To the extent consistent with applicable law, Plant Health Care, Inc. excludes for itself and its suppliers any liability, whether based in contract or tort (including negligence), for incidental, consequential, indirect, special, or punitive damages of any kind, or for loss of revenue or profits, loss of business, or crop injury arising out of or in connection with the sale, use, injury, performance, or failure of this product, even if Plant Health Care, Inc. or its authorized reseller has been advised of the possibility of such damages, and limits its liability to replacement of the product or a refund of the purchase price paid, at the option of Plant Health Care, Inc. This disclaimer of liability for damages will not be affected if any remedy provided herein fails of its essential purpose.

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### TANK MIXES

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### LIMITED USE LICENSE AND PATENTS

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© 2010 Plant Health Care, Inc. ProAct® is a registered trademark of Plant Health Care, Inc. Always read and follow label instructions before buying or using this product.

# ProAct®

[Alternate Brandname: N-Hibit Gold HB™]

## Pre-plant Seed Treatment

[OPTIONAL TAG LINES – For use individually or in combination on labels: A biochemical pesticide seed treatment; Improves stand establishment; suppresses nematode egg production; enhances crop growth, quality and yield; Increases Root Mass; Activates plant growth and defense systems; Plant Health Regulator; Plant Health Promoter; Improves standability; Decreases lodging; Increases plant stamina and vigor; Aids in management of post-harvest diseases; Enhances plant health; Facilitates Integrated Pest Management Programs; Harp-N-Tek™ *inside* (LOGO); Harp-N-Tek is Plant Health Care's trademark for its proprietary harpin protein technology]

**FOR USE ONLY AS SEED TREATMENT IMMEDIATELY PRIOR TO PLANTING**

**Dry Powder**

**ACTIVE INGREDIENT:**

Harpin $\alpha\beta$  Protein: ..... 1.0%

**OTHER INGREDIENTS:** ..... 99.0%

Total: ..... 100.0%

EPA Reg. No. 71771-3

EPA Est. No. 71771-PA-001

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION  
PRECAUCION**

See additional precautionary statements elsewhere on the label.

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you.)

**Net Weight:**

**PLANT HEALTH CARE, INC.**  
283 Kappa Drive, Pittsburgh, PA 15238  
1-800-421-9051 • www.planthealthcare.com

Read the entire label before using this product.

Read WARRANTY AND DISCLAIMER before buying or using. If terms are not acceptable, return at once unopened.

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION**

Harmful if inhaled. Avoid breathing dust. Remove and wash contaminated clothing before reuse.

FIRST AID	
If inhaled:	<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 center or doctor for further treatment advice.</li> </ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Pesticide Information Center at 1-800-858-7378 for emergency medical treatment information.	

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Shoes and socks.

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

**USER SAFETY RECOMMENDATIONS**

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. 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 when cleaning equipment or disposing of equipment wash waters or rinsate.

**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 requirement specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box apply to uses of this product that are covered by the Worker Protection Standard.

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Do not enter or allow worker entry into treated areas during restricted-entry interval (REI) of 4 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 plant, soil, or water) is:

- Coveralls;
- Waterproof gloves; and
- Shoes and socks.

**PRODUCT INFORMATION**

ProAct stimulates the plant's natural growth and defense systems, enhancing overall plant health. Healthier plants exhibit increased plant stamina and vigor, leading to one or more of the following benefits: improved stand and root establishment, suppressed nematode egg production, increased marketable yield, and enhanced quality. ProAct works best when used in conjunction with good crop management practices.

**GENERAL INSTRUCTIONS**

**GROWTH ENHANCEMENT AND MARKETABLE YIELD**

Use ProAct to increase plant health and vigor, to assist in the management of certain diseases, to suppress nematode egg production, to improve stand and root establishment, and to enhance crop quality and marketable production.

**SITES**

Use ProAct as a pre-plant seed treatment in greenhouses, shadehouses, and nurseries or for field production of all crops listed on this label.

**USE PRECAUTIONS**

**USE PROMPTLY**

Use product promptly to minimize absorption of water. Reseal opened packages to minimize exposure to air and moisture. Use opened packages within 3 weeks.

**MIXING**

Use ProAct in addition to other dry commercial seed treatments and in conjunction with other dry hopper box treatments. Apply ProAct only to dry seed. Do not mix ProAct with water. Check with your local Plant Health Care representative for specific compatibility information for ProAct and other labeled products.

**USE OF TREATED SEED**

Treat only seeds needed for immediate use, minimizing the interval between treatment and planting. Do not store excess treated seed beyond planting time.

**APPLICATION INSTRUCTIONS**

Apply ProAct as a dry pre-plant seed treatment. Apply product to dry seed using standard seed treatment equipment or apply directly to the hopper box. When applying directly to the hopper box, fill half the hopper box with seed and sprinkle the appropriate half-rate of ProAct over seed. See the appropriate application rates under CROPS and APPLICATION RATES. Finish filling the hopper box with seed and sprinkle the remaining ProAct over the new seed.

**CROPS AND APPLICATION RATES**

**Vegetable, Cucurbit, Cole, and Other Crops**

Crop	Rate
FRUITING VEGETABLES LEAFY AND COLE CROPS CUCURBITS ONION GARLIC SCALLION SWEET CORN	0.1 – 5 oz per 100 lbs seed

**Field Crops**

Crop	Rate
LEGUME VEGETABLES LEGUME FRESH AND WET PROCESSING VEGETABLES COTTON TUBER CROPS FORAGE CROPS CORN (grain, silage, seed, or popcorn) OIL AND SEED CROPS ROOT CROPS RICE SMALL GRAINS SORGHUM SUGARCANE	0.1 – 5 oz per 100 lbs seed

**Tobacco**

Crop	Rate
TOBACCO – All types	0.1 – 5 oz per 100 lbs seed

**Berries and Small Fruit**

Crop	Rate
BERRIES AND SMALL FRUIT	0.1 – 5 oz per 100 lbs seed

**Trees and Vines**

Crop	Rate
AVOCADO CITRUS NUT TREES POME FRUIT (Apple, Pear) STONE FRUIT VINE CROPS TREES Conifer Broadleaf	0.1 – 5 oz per 100 lbs seed

**Turf and Ornamentals**

Crop	Rate
TURF GRASS ORNAMENTALS (Bulbs, seeds, or tubers) – All types	0.1 – 5 oz per 100 lbs seed

**Specialty Crops**

Crop	Rate
ALOE BANANA COFFEE FIGS HERBS MANGO PAPAYA PINEAPPLE TARO ROOT	0.1 – 5 oz per 100 lbs seed

**Grasses Grown For Seed**

Crop	Rate
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TURF GRASSES  
FORAGE GRASSES

0.1 - 5 oz  
per 100 lbs seed

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE**

Keep product away from exposure to air, sunlight, moisture, or heat. Do not store in temperatures over 110°F for more than seven days. Use product within 3 weeks of opening and the same day as mixing.

**PESTICIDE DISPOSAL**

Wastes resulting from use of this product must be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING**

Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment, then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**WARRANTY AND DISCLAIMER**

**CONDITIONS OF SALE AND EXCLUSIVE WARRANTY**

The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness of the product, or other unintended consequences may result because of such factors as horticultural practices, use with other products (unless otherwise expressly provided in the Directions for Use of this product), presence of other materials, the manner of use or application, and various environmental conditions, including but not limited to weather conditions and moisture conditions. To the extent consistent with applicable law, all of the aforementioned risks are beyond the control of Plant Health Care, Inc. and the Buyer shall assume all such risks.

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**LIMITATION OF LIABILITY**

To the extent consistent with applicable law, Plant Health Care, Inc. excludes for itself and its suppliers any liability, whether based in contract or tort (including negligence), for incidental, consequential, indirect, special, or punitive damages of any kind, or for loss of revenue or profits, loss of business, or crop injury arising out of or in connection with the sale, use, injury, performance, or failure of this product, even if Plant Health Care, Inc. or its authorized reseller has been advised of the possibility of such damages, and limits its liability to replacement of the product or a refund of the purchase price paid, at the option of Plant Health Care, Inc.. This disclaimer of liability for damages will not be affected if any remedy provided herein fails of its essential purpose.

**ASSUMPTION OF RISK**

To the extent consistent with applicable law, Buyer and Users of this product assume the risk of any use contrary to the Directions for Use and/or all of the risks inherent in the use of the product as set forth above. Plant Health Care, Inc. offers this product, and the Buyer and User accept it, subject to the foregoing Conditions of Sale and Exclusive Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of Plant Health Care, Inc.

**PROMPT NOTICE OF CLAIM**

Plant Health Care, Inc. must have prompt notice as soon as Buyer or User has reason to believe they may have a claim (not to exceed twenty-one days from the date of application) so that an inspection of the affected property and growing crops may be made. Unless Buyer and Users shall promptly notify Plant Health Care, Inc. of any claims, they shall be barred from obtaining any remedy.

**MIXES**

To the extent consistent with applicable law, mixing or use of this product with any other product, which is not specifically and expressly authorized by the label, shall be the exclusive risk of User, Applicator, and/or Application Advisor. Read and follow the entire label of each product to be used in a mix with this product.

**LIMITED USE LICENSE AND PATENTS**

The contents of this package and/or the use of the contents are covered by U.S. Patent Nos. 5,849,868, 5,859,324, 5,776,889, 5,977,060, and 6,277,814 as well as pending patent applications. The purchase of this package grants the Buyer a license, under these patents and patent applications, to use its contents only for treating plants, plant seeds, and other plant parts as described herein.

© 2010 Plant Health Care, Inc. ProAct® is a registered trademark of Plant Health Care, Inc. Always read and follow label instructions before buying or using this product.

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# ProAct®

[OPTIONAL TAG LINES – For use individually or in combination on labels and/or accompanying materials: Home, Yard & Garden; A Biochemical Plant Activator For Healthier Plants; Promotes Plant Growth; Concentrate; Helps Manage Disease For Home and Garden Use; For Healthier Plants; Healthier Plants; Better Blooms; Larger Harvests; Plant Health Regulator; Plant Health Promoter; Growth Stimulator; Easy to Use; Broad Spectrum; Promotes Plant Growth for Superior Gardens; Breakthrough Technology; Revolutionary; Effective; Economical; For Use in Water Gardens and Ornamental Ponds; Delivering stronger and healthier plants; Increases root mass; Improves the health of every plant you grow! Improves the health of every plant in your garden! Improves the health of every plant you grow in your Garden! Fruits • Garden Flowers & Shrubs • House Plants • Vegetables; Boost overall growth and production; Improve plant stamina & vigor; Strengthen a plant's resistance to disease; Mix and Spray, or Simply Mix and Spray, or Mix and Spray Every Three Weeks, or Simply Mix and Spray Every Three Weeks; Harp-N-Tek™ inside [LOGO]; Harp-N-Tek is Plant Health Care's trademark for its proprietary harpin protein technology]

**ACTIVE INGREDIENT:**

Harpinαβ Protein: ..... 1.0%

**OTHER INGREDIENTS:** ..... 99.0%

Total: ..... 100.0%

EPA Reg. No. 71771-3      EPA Est. No. 71771-PA-001  
 [ALTERNATE RE-PACKER'S EPA Est. No.: XXXX-XX-XXX]

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See back panel for additional precautionary statements.

**Net Weight:**

[OPTIONAL – Packed for:]  
 Plant Health Care, Inc. • 285 Kappa Drive  
 Pittsburgh, PA 15238  
 1-800-421-9051 [And/Or] www.planthealthcare.com

**DIRECTIONS FOR USE**

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

Harpinαβ, the active ingredient in ProAct, is derived from naturally occurring harpin proteins. ProAct stimulates the plant's natural growth and defense systems, enhancing overall plant health. Use ProAct to boost overall plant growth, vigor, and production, and to aid in the management of disease.

Use ProAct on all plants grown indoors and outdoors, including Roses and other Flowers, Vegetables, Fruiting Trees, Berries, Vines, Herbs, Root Crops, Floating and Emergent Aquatic Plants in Water Gardens and Ornamental Ponds, and all Ornamental Plants such as Trees, Shrubs, and Turf.

**Mixing and Application Instructions**

1. Add one packet to 3 gallons of water [ALTERNATE LANGUAGE FOR SMALL PACKET: Add one packet to 1 gallon of water] (¼ teaspoon per quart of water) and mix thoroughly.
2. Apply mixed product to plant foliage with a pump sprayer, mister, watering can, or other suitable applicator. Apply as a fine mist for most efficient coverage.
3. Apply when plants are actively growing. For best results, continue applications every 3 weeks through harvest, until first frost, or until plants become dormant.
4. Apply product the same day it is mixed. Re-apply if it rains within 30 minutes of application.
5. Reseal opened packets to minimize exposure to air and moisture. Use opened packets within 3 weeks.

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE**

Store dry and out of direct sunlight. Do not store in temperatures over 110°F for more than 7 days.

**PESTICIDE DISPOSAL AND CONTAINER HANDLING**

Nonrefillable container. Do not reuse or refill this container.

**If empty:**

Place in trash or offer for recycling if available.

**If partly filled:**

Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION**

Harmful if inhaled. Avoid breathing dust or spray mist. Remove and wash contaminated clothing before reuse. Wash your hands after use. People and pets may enter treated areas after spray has dried.

**FIRST AID**

<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 center or doctor for further treatment advice.</li> </ul>
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**HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Pesticide Information Center at 1-800-858-7378 for emergency medical treatment information.

**ENVIRONMENTAL HAZARDS**

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will ensure that wind and rain does not blow or wash pesticide off the treatment area. Sweeping any product that lands on a driveway, sidewalk, or street back on to the treated area of the lawn or garden will help prevent runoff to water bodies or drainage systems.

**NOTICE:** To the extent consistent with applicable law, buyer assumes all responsibility for safety and use not in accordance with label directions.

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The contents of this package and/or the contents are protected by U.S. Patent Nos. 5,849,868, 5,324, 5,776,889, 5,977,060, and 6,277,814. REFORMULATION OR REPACKAGING FOR SALE IS PROHIBITED.

© 2010 Plant Health Care, Inc. ProAct® is a registered trademark of Plant Health Care, Inc. Always read and follow label instructions before buying or using this product.

[ALTERNATE LOCATION for Address/Phone/Website]  
[OPTIONAL - Packed for:] Plant Health Care, Inc., 285 Kappa Drive, Pittsburgh, PA 15238.

**OPTIONAL LANGUAGE for labels and accompanying materials:**

CAN BE USED UP TO THE DAY OF HARVEST

**What does ProAct do?**

- Stimulates a plant's defense and growth mechanisms
- Boosts overall growth, vigor, and production
- Aids in the management of disease
- Improves the plant's ability to grow and protect itself from stresses caused by adverse environmental conditions

[BARCODE]

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