

# Precision\* Accu-Pak\*

## INSECT GROWTH REGULATOR

For control of selected insects, including whiteflies, soft scales, fungus gnats, thrips, shore flies, and lepidopterous leafminers in container and landscape ornamentals, nurseries, greenhouse ornamental crops, and interiorscapes

### ACTIVE INGREDIENT:

Fenoxycarb: (CAS No. 72490-01-8)

25.0%

### OTHER INGREDIENTS:

75.0%

### TOTAL:

100.0%

Precision is a wettable powder.

## KEEP OUT OF REACH OF CHILDREN. CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-750 EPA Est. 67545-AZ-1<sup>6</sup> EPA Est. 5905-GA-01<sup>H</sup>

(Superscript is first letter of lot number on container)

Made in Switzerland

This outer protective container contains Precision in 8 small, inner water-soluble pouches. Entire inner pouches and their contents dissolve in water. After opening outer container, immediately dump the required number of pouches into the partially filled sprayer or mix tank. Do not handle the soluble pouches or expose them to moisture, since this may cause rupturing. If not using all water-soluble pouches, press to reseal the outer protective container for storage. Novartis and the Seller strongly recommend against using partial water-soluble pouches of Precision. Such practice may result in injury and/or failure of performance.

### DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

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

### CONDITIONS OF SALE AND 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 should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application all of which are beyond the control of Novartis Crop Protection, Inc. or the Seller. All such risks shall be assumed by the Buyer.

Novartis warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions for Use** subject to the inherent risks referred to above. **Novartis makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Novartis or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product.** Novartis and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing **Conditions of Sale and Warranty**, which may be varied only by agreement in writing signed by a duly authorized representative of Novartis.

### DIRECTIONS FOR USE

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

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

### AGRICULTURAL USE REQUIREMENTS

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

**Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.**

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
- Waterproof gloves
- Shoes plus 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.

**Do not enter treated areas without protective clothing until sprays have dried.**

Observe all precautions and limitations on this label and on the labels of each product used in tank mixtures with this product.

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, ILLEGAL RESIDUES, AND/OR POOR INSECT CONTROL.**

### GENERAL INFORMATION

For control of selected insects, such as whiteflies (sweet potato and greenhouse), soft scales, fungus gnats, shore flies, and lepidopterous leafminers, in landscape ornamentals, container grown ornamentals, non-bearing fruit and nut trees in nurseries, Christmas tree plantations, ground covers, greenhouse, lath and shade house ornamental crops, and interiorscapes.

Precision can be used in conjunction with IPM practices including the early detection of target insect populations, use with beneficial insects, threshold treatment levels, cultural control practices, and other procedures to manage target pest populations. Refer to local extension or university personnel or brochures for information on IPM practices.

### APPLICATION

For control of white flies (silverleaf [alias sweet potato] and greenhouse), thrips (including Western flower thrips), and soft scale insects (such as brown soft scale, cottony cushion scale, euonymus scale, magnolia white scale, oleander pit scale, wax scale, white peach scale, etc.), apply 2-4 oz. of Precision per 100 gals. of water as soon as the presence of target insects is detected. Sprays for control of scale

should be directed to the crawler stage. Repeat applications at 7-14 day intervals to control the immature stages of the insect pests. Apply the spray mixture uniformly to all surfaces of the plants, particularly the stem and the undersides of the leaves. Spray the plants to the point of runoff. Follow the manufacturer's recommendations for proper use of application equipment.

For the control of fungus gnats (*Bradysia* spp.) and shore flies (*Scatella* spp.), apply 4 oz. of Precision in 100 gals. of water as a spray to all surfaces where the insect pests may breed. This includes the potting media surfaces, bench tops, undersides of benches, and the areas under the benches that may be contaminated with potting media or algae. For best results, the sprayed surfaces should be drenched with sufficient water to thoroughly wet the surface of the pots and soil under the benches. Repeat applications on a 10-14 day schedule to minimize reinfestations.

For use during plug establishment and on newly established bedding plants, do not exceed 2 oz. of Precision per 100 gals. of spray on a 14-day schedule.

For control of lepidopterous leafminers (e.g., azalea leafminer, citrus leafminer), apply 6-8 oz. of Precision per 100 gals. of water when oviposition begins on the new flush of growth. A second application should be made 14-21 days later. Applications should be made in full coverage sprays to the point of runoff.

For the control of honeylocust pod gall midge (*Dasineura gleditschiae*) on honeylocust trees, apply Precision at 2-4 oz. in 100 gals. of spray in combination with an adulticide labeled for this pest. Spray the plants to the point of runoff. Applications should be made on a 14-day schedule or based on field surveys. Precision, when used in this manner, will result in reduced **viable** larvae and pupae compared to use of the adulticide alone.

Precision will not control the adult stages of the insect pests. For control of adults, insecticides labeled for adult insect control should be used.

Do not exceed a maximum of 30 applications per year for greenhouse use.

### Application Instructions for Use in Irrigation Systems

**Chemigation:** Do not apply Precision through any type of irrigation system when applying for control of foliar insects. Precision may be applied through overhead irrigation at rates recommended in this label to provide proper coverage of all surfaces when treating for fungus gnats and shore flies. Do not apply this product through any other type of irrigation system. Plant injury or lack of effectiveness can result from nonuniform distribution of treated water. If you have questions about calibration, you should contact State Extension Specialists, equipment manufacturers, or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide applications 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 the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Operation Instructions

- 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 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. Avoid spray overlap as injury may result.
- Prepare a minimum mixture of 1 gal. of water to 1 packet of Precision and inject this mixture into the system. Injecting a larger volume of a more dilute mixture will usually provide more accurate calibration of metering equipment. Maintain sufficient agitation to keep Precision in suspension.
- Meter into irrigation water during the beginning of the irrigation cycle. It is important to continue running the system after the Precision application is finished to remove all the product from the foliage and get it into the areas where the immature insect stages are located.

**Precaution for irrigation applications:** Where distribution patterns do not overlap sufficiently, unacceptable control may result. Where distribution patterns overlap excessively, injury to desirable plants may result.

**Notes:** (1) Precision has been evaluated for safety to many greenhouse, nursery, bulb, and ornamental plants as a foliar spray for whitefly, thrips, scales, etc. and as a drench for control of fungus gnats and shore flies. Precision has been shown to be safe on over 150 foliage plants, bedding plants, flowering plants, and nursery cultivars grown under University research and commercial production conditions. While many species and cultivars have been tested and exhibited safety to labeled rates of Precision, each specie and cultivar should be evaluated for phytotoxicity prior to making an application to the entire crop. (2) To evaluate possible phytotoxic effects, before treating ornamental crops, the grower should test Precision on a small group of plants, under the same conditions in which they will be grown, for at least 2 weeks. (3) Applications should not be made to poinsettia after bract formation.

#### Mixing Instructions

Prepare no more spray mixture than is necessary for the immediate operation. Thoroughly clean spray equipment before using this product. Agitate thoroughly before and during application. Rolling agitation is suggested to keep Precision thoroughly mixed and in suspension. Flush spray tank thoroughly with clean water daily after use and dispose of pesticide rinsate by application to a previously treated area.

**Precision Alone:** Add  $\frac{1}{2}$ - $\frac{2}{3}$  of the required amount of water to the spray or mix tank. With the agitator running, drop the required number of **unopened** soluble packets of Precision into the tank all at once. Continue agitation while adding the remainder of the water. Begin application of the spray solution after the packets have dissolved and the material has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

**Precision + Tank Mixtures:** Precision is compatible with most commonly used insecticides, fungicides, and spray adjuvants used in the production of bedding plants, ornamentals, and other crops grown in nurseries. When using Precision in tank mixture with other pesticides, observe all directions for use and precautions on the respective tank mix label.

Add  $\frac{1}{2}$ - $\frac{2}{3}$  of the required amount of water to the spray or mix tank. With the agitator running, drop the required number of **unopened** soluble packets of Precision into the tank all at once. Continue agitation while adding the remainder of the water. Tank mix partners may be added only when: (1) the Precision packets and their contents have dissolved and dispersed into the mix water, and (2) when the tank has filled with water. Maintain agitation when adding the tank mix partners and while spraying the solution onto the crop.

**Precautions:** (1) Water-soluble packets of Precision must be completely dissolved and dispersed in water before any other tank mix partner, including micronutrients or other liquid or dry fertilizer is added to the spray solution. (2) When more than one product is packaged in water-soluble packets, add all of those products at once to the mix or spray tank. Apply any other products after the soluble packets have completely dissolved and the material has completely dispersed into the mix water.

Note: Do not let spray mixture stand overnight in the spray tank. Rinse spray tank at the end of the day.

**Table 1: Application to Control Whiteflies, Scales, and Thrips**

Area to be treated	20,000	10,000	5,000
Water Volume (sq. ft.)	100 gals.	50 gals.	25 gals.
Number of Water-Soluble Packets	2-4	1-2	1

**Table 2: Spray Application to Control Fungus Gnats and Shore Flies\***

Area to be treated (sq. ft.)	20,000	10,000	5,000
Water Volume	100 gals.	50 gals.	25 gals.
Number of Water-Soluble Packets	4	2	1

\*For drench application: First apply as a spray and drench in with sufficient water to thoroughly wet the surface of the potting medium and soil under benches following the spray application.

#### Electrostatic Spraying Systems, PulsFog® Systems, or Other Low Volume Systems

Precision has been evaluated and shown to be effective for foliar applications when applied through these application systems. To calculate the amount of product to be applied, use the appropriate amount of Precision for the square footage to be treated with spray as listed. The amount of carrier (water) is dependent on the amount needed for adequate coverage. Electrostatic Spraying Systems should not be used for applications to control fungus gnats and shore flies. By design, Electrostatic Spraying Systems evenly position nearly all the spray material on the plant surface and not on the soil and growing media, which is the planned target.

## STORAGE AND DISPOSAL

#### Pesticide Storage

Do not store this product under wet conditions; store in a cool, dry place. Handle outer container carefully to avoid breakage of inner soluble pouches.

#### Pesticide Disposal

Do not contaminate water, food, or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

#### Container Disposal

Do not reuse outer container. Dispose of empty outer container in a sanitary landfill or by incineration, or, if allowed by state and local authorities, dispose of by burning. If container is burned, stay out of smoke.

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

## PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

##### CAUTION

Harmful if inhaled or absorbed through the skin. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with eyes, skin, or clothing.

#### Statement of Practical Treatment

**If on skin:** Wash with plenty of soap and water. Get medical attention.

**If in eyes:** Flush eyes with plenty of water. Call a physician if irritation persists.

**If inhaled:** Move victim to fresh air.

#### Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

The use of coveralls and a respirator with either an organic vapor removing cartridge with a prefilter approved for pesticides or a canister approved for pesticides is recommended during application.

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

#### User Safety Recommendations

##### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

#### Environmental Hazards

This product is toxic to fish and aquatic invertebrates. Drift and runoff from treated sites may be hazardous to aquatic invertebrates in adjacent aquatic sites. 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 disposing of equipment wash waters.

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