

# Specimen Label

## Legacy\* Turf Growth Regulator



For Growth Management and Quality Improvement of Perennial Cool- and Warm-Season Turfgrasses on Golf Courses.

### Active Ingredient

flurprimidol: $\alpha$ -(1-methylethyl)- $\alpha$ -[4-(trifluoromethoxy)phenyl]-5-pyrimidinemethanol .....	13.26%
trinexapac-ethyl: 4-(cyclopropyl-alpha-hydroxymethylene)-3,5-dioxo-cyclohexanecarboxylic acid ethyl ester.....	5.00%
Other Ingredients .....	81.74%
<b>TOTAL.....</b>	<b>100.00%</b>

Contains 1.10 pounds of flurprimidol per gallon of product.  
Contains 0.41 pounds of trinexapac-ethyl per gallon of product.

## Keep Out of Reach of Children WARNING / AVISO

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 in detail.)

### Precautionary Statements

#### Hazards to Humans and Domestic Animals

Causes substantial but temporary eye injury. Do not get in eyes or on skin or clothing. Harmful if swallowed or inhaled. Avoid breathing spray mist. Wear protective eyewear and chemical-resistant gloves.

#### Environmental Hazards

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

### 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. 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 center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15 - 20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If inhaled</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. In case of emergency endangering health or the environment involving this product, call **INFOTRAC** at **1-800-535-5053**.

**SPECIALTY CHEMICAL: Do not ship or store with food, feeds, drugs or clothing.**

**Notice:** Read the entire label before using. Use only according to label directions. **Before buying or using this product, read "Warranty Disclaimer," "Inherent Risks of Use" and "Limitation of Remedies" inside label booklet.**

For additional product information, visit us at [www.sepro.com](http://www.sepro.com)

EPA Reg. No. 67690-46  
FPL 051208

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## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category C on an EPA chemical resistance category selection chart.

### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants;
- Shoes plus socks;
- Chemical-resistant gloves (such as nitrile, butyl rubber, neoprene, or barrier laminate); and
- Protective eyewear.

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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. **Do not** reuse them.

## USER SAFETY RECOMMENDATIONS

### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE 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.

## Directions for Use

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

**Read all *Directions for Use* before applying this product.**

## 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 area without footwear until sprays have dried.**

## General Information

Legacy integrates patented<sup>†</sup> synergy of turf growth regulator technology for use on both warm and cool-season perennial turfgrasses on golf courses. Legacy reduces stem elongation and leaf blade length in perennial turfgrasses resulting in a more compact and dense growth form. Growth regulation from Legacy results from suppression of the plant hormone, gibberellic acid (GA), responsible for cell elongation in most plants.

Legacy's patented site of action plant growth regulator (PGR) synergy results in growth suppression, improved turfgrass color and quality, extended spray intervals, and suppression of *Poa annua*. Plant physiological advantages to applications of Legacy include:

1. Multiple plant sites of uptake: Legacy is absorbed by plants via roots, stems, and leaves; and
2. Multi-site activity within gibberellic acid (GA) biosynthesis pathway: Legacy inhibits GA production at both early and late stages in the pathway.

Turf growth regulator absorption via the roots and foliage allows for more efficient uptake by the plant ensuring an optimal amount of active ingredient is available for GA inhibition. Additionally, blocking GA biosynthesis early and late in the biological pathway regulates GA more efficiently than at a single site within this cycle.

**†The synergy derived from the combination of Type II Class A and Type II Class B PGRs is protected by United States Patent No. 7,135,435. Additional patent rights pending.**

Broadcast treatments should be made on medium to high quality turfgrass areas. An appropriate fertility program for the desired turf species should be followed in conjunction with Legacy applications to provide the best turfgrass enhancement and reduce potential for discoloration.

### Benefits of Legacy Applications to Turfgrass:

- Shoot growth suppression of warm and cool season turfgrasses resulting in decreased mowing frequency and turfgrass clippings.
- Increased turfgrass density, wear resistance, and improved color on warm and cool season turfgrass species resulting in improved turf quality.
- Suppression of *Poa annua* (Annual Bluegrass) in cool-season turfgrasses.
- Improved water use efficiency of warm and cool season turfgrass resulting in pre-drought stress conditioning.

**NOTICE TO USER:** Turfgrass responses to Legacy may vary within turfgrass species due to the large number of cultivars and varieties available. The rates recommended on this label are rate ranges and should be used only as guidelines. Neither the manufacturer nor seller has determined if Legacy can be used safely or effectively on turfgrass species not mentioned on this label. For turfgrass species not listed on this label the user should apply Legacy to a small test area to determine growth response and desired level of growth regulation prior to large scale applications.

### General Use Precautions

- **Legacy is not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production or for research purposes.**
- **Do not** apply to bermudagrass putting greens or overseeded bermudagrass putting greens.
- **Do not** apply to shrubs, bedding plants, and/or food plants.
- Not recommended for turfgrasses under stress due to temperature and moisture extremes and disease, and/or insect pressures.
- **Do not** seed turfgrass species within 3 weeks prior to or 3 weeks after a Legacy application.
- Legacy should not be applied until 6 to 8 weeks after turfgrass sprigging or laying sod. Turfgrass should be well established and actively growing prior to application.
- **Do not** apply to saturated soils or when a significant moisture event is anticipated.
- Additional turfgrass growth regulation may occur when Legacy is tank-mixed or used in conjunction with demethylation inhibitor (DMI) or sterol inhibiting fungicides.
- **Do not** apply to turf used for livestock production.
- Multiple applications of Legacy can be made yearly, but **do not** apply more than 350 fl. oz./A of Legacy per acre per year.
- **Chemigation:** **Do not** apply Legacy through any type of irrigation system.

### Application Timing:

Applications of Legacy should be made to turfgrass actively growing. Spring applications should be made after resumption of active seasonal growth of turfgrass. The final application of the season should be timed a minimum of 4 weeks before the onset of

inactive grass growth or winter dormancy. Applications to overseeded turfgrasses in dormant bermudagrass stands should be made 4 weeks prior to expected bermudagrass green-up.

### Irrigation:

Rainfall or irrigation should be delayed at least 2 hours after application or until product has dried on the leaf surface but should occur within 24 hours after application. Avoid mowing turfgrass areas treated with Legacy until after rainfall or irrigation occurs.

### Turf Color and Post Treatment Turf Management:

Turfgrass treated with Legacy may appear darker green in color. This color change, which appears 1 to 2 weeks after treatment, may persist an additional 3 to 6 weeks. Treated areas should be managed to encourage the growth of a healthy vigorous turf.

## Application Directions

### Mixing Directions:

Add Legacy to a spray tank half filled with clean water while agitating. Allow sufficient mixing time to ensure consistent mixing of Legacy. Finish filling the spray tank. Continue agitation throughout the spraying operation to ensure uniform application. Legacy should be applied using a boom-type sprayer with bypass and/or mechanical agitation calibrated to deliver 20 to 100 gallons/acre of spray solution (0.5 to 2.5 gallons/1000 ft<sup>2</sup>). In line strainers and nozzle screens should be 50 mesh or larger. The use of a coloring agent or foam to mark areas already sprayed is suggested for uniform application without skips and overlaps. Performance may be improved with the addition of a readily available nitrogen (N) source at 0.125 to 0.5 lbs N/1000 ft<sup>2</sup> or iron (Fe) at suggested label rates to the spray mix.

### Legacy + Tank Mixtures:

Legacy can be tank mixed and is compatible with most commonly-used pesticides and foliar nutrient products. However, compatibility of Legacy with tank mix partners should be tested before use.

**NOTE:** It is recommended that the compatibility of Legacy in any tank-mix combination be tested before use. To determine the physical compatibility with other products, use a jar test as described below:

Using a quart jar, add the proportionate amounts of the products to 1 quart of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure sequence for adding required ingredients to the spray tank.

**Read and follow all label directions for each tank-mix product.**

## Legacy for Growth Reduction of Perennial Turfgrass Species

A multiple application program using Legacy provides growth reduction of perennial turfgrass species resulting in decreased mowing frequency and turfgrass clippings. For cool-season grasses, initial applications should begin in early spring following resumption of active growth. For warm-season grasses, initial applications should begin when the grass has completely recovered from winter dormancy and is growing vigorously. For both warm and cool-season grasses, applications should be discontinued a minimum of 4 weeks before the onset of inactive grass growth or winter dormancy. Use lower rate range in early spring and late fall applications to avoid excessive growth regulation. Refer to **Table 1** for rate recommendations for growth regulation of perennial turfgrass species.

**Table 1: Recommended Rate Ranges for Growth Regulation of Perennial Turfgrass Species with Legacy Using a Multiple Application Program**

Turfgrass Species	Early Spring/Late Fall Applications	Repeat Applications	
	Rate of Legacy /A (fl. oz./A) <sup>2,3</sup>	Rate of Legacy /A (fl. oz./A) <sup>2</sup>	Treatment Interval
<b>Cool-Season Turfgrasses</b>			
Bentgrass (golf course fairway)	10 to 15 fl. oz./A	10 to 20 fl. oz./A	2 to 6 weeks
Bentgrass putting greens	5 to 8 fl. oz./A	5 to 10 fl. oz./A	2 to 4 weeks
Kentucky Bluegrass/ Perennial Ryegrass Mixture	15 to 22 fl. oz./A	15 to 30 fl. oz./A	2 to 6 weeks
Perennial Ryegrass <sup>1</sup>	15 to 22 fl. oz./A	15 to 30 fl. oz./A	2 to 6 weeks
<b>Warm-Season Turfgrasses</b>			
Seashore Paspalum	10 to 15 fl. oz./A	10 to 20 fl. oz./A	2 to 6 weeks
Tifway Bermudagrass	10 to 15 fl. oz./A	10 to 20 fl. oz./A	2 to 6 weeks
TifSport Bermudagrass	8 to 12 fl. oz./A	8 to 16 fl. oz./A	2 to 6 weeks
Zoysiagrass	8 to 12 fl. oz./A	8 to 16 fl. oz./A	2 to 6 weeks

<sup>1</sup> For perennial ryegrass overseeded fairways, applications should be delayed until perennial ryegrass is well established (3 to 4 weeks after germination). Final spring application should be made a minimum of 4 weeks prior to expected bermudagrass green-up.

<sup>2</sup> Higher rate ranges should be utilized for perennial turfgrass species maintained at higher mowing heights.

<sup>3</sup> Use lower rate ranges during early spring or late fall when turfgrass growth and vigor are reduced.

## Legacy for *Poa annua* (Annual Bluegrass) Suppression in Cool Season Turf

A growth regulation program using Legacy suppresses *Poa annua* in cool season turfgrasses. Research has demonstrated that programmed applications of Legacy are effective at suppressing *Poa annua* populations in cool-season turfgrasses when compared to formulations of trinexapac-ethyl which have shown to have minimal impact on reducing *Poa annua* populations. This program provides a gradual increase in cool-season turfgrass populations while reducing *Poa annua* populations over one to several growing seasons. Temporary initial discoloration of *Poa annua* is possible with aggressive rates of Legacy, especially during temperature

extremes. Overseeding of perennial turfgrass species should occur a minimum of 3 weeks following the last application of Legacy for the season. For more aggressive *Poa annua* conversion, users should consider programmed applications of Cutless\* 50W at labeled rates and timings for the desired turfgrass species. Refer to **Table 2** for rate recommendations for *Poa annua* suppression in cool-season turfgrasses using Legacy.

### • Bentgrass (golf course fairway)

Apply Legacy for *Poa annua* suppression in fairway height bentgrass at a rate of 8 to 15 fl. oz./A in early spring following resumption of active growth of the grass. Repeat applications of 8 to 20 fl. oz./A of Legacy should be made at 3 to 6 week intervals until late summer or early fall. Reduced rates of Legacy should be considered in bentgrass fairways with high populations of *Poa annua* or when temporary *Poa annua* discoloration cannot be tolerated. Normal management practices such as fertilization, aeration and overseeding will encourage growth of bentgrass.

### • Bentgrass Putting Greens

Annual turfgrass species, such as *Poa annua* are more strongly regulated by applications of Legacy often resulting in transitory yellowing or temporary discoloration. Therefore, reduced rates of Legacy should be used on bentgrass putting greens with high populations of *Poa annua* (>50%) or when temporary *Poa annua* discoloration cannot be tolerated. Over time, programmed applications of Legacy throughout the growing season will suppress *Poa annua* populations, resulting in increased populations of bentgrass. Follow normal management practices such as fertilization, aeration and overseeding that encourage growth of bentgrass. **Do not** overseed within 3 weeks following the final application of Legacy in the season. Use of Legacy on bentgrass greens may increase putting speed without reducing the height of cut.

#### – Bentgrass Greens with less than 50% *Poa annua*:

Apply Legacy to bentgrass as part of an overall greens management program both for growth regulation and *Poa annua* suppression. An initial application of Legacy at 5 to 10 fl. oz./A should be made in the spring months after bentgrass greens are growing vigorously and have been mowed 3 or 4 times. Repeat applications of 5 to 10 fl. oz./A of Legacy should be made at 2 to 4 week intervals through early fall.

#### – Bentgrass Greens with more than 50% *Poa annua*:

Apply Legacy to bentgrass as part of an overall greens management program both for growth regulation and *Poa annua* suppression. An initial application of Legacy at 5 fl. oz./A should be made in the spring months after bentgrass greens are growing vigorously and have been mowed 3 or 4 times. Repeat applications of 5 to 10 fl. oz./A of Legacy should be made at 2 to 4 week intervals through early fall.

• **Kentucky Bluegrass, Perennial Ryegrass Mixtures**

Apply Legacy for *Poa annua* suppression in fairway height Kentucky bluegrass and perennial ryegrass mixtures at a rate of 15 to 25 fl. oz./A in early spring following resumption of active growth of the grass. Repeat applications of 15 to 30 fl. oz./A of Legacy should be made at 2 to 6 week intervals until late summer or early fall. Reduced rates of Legacy should be considered in Kentucky bluegrass, perennial ryegrass mixtures with high populations of *Poa annua* or when temporary *Poa annua* discoloration cannot be tolerated. Normal management practices such as fertilization, aeration and overseeding will encourage growth of bluegrass and/or ryegrass.

• **Perennial Ryegrass**

Apply Legacy for *Poa annua* suppression in fairway height perennial ryegrass at a rate of 15 to 22 fl. oz./A in early spring following resumption of active growth of the grass. Repeat applications of 15 to 30 fl. oz./A of Legacy should be made at 2 to 6 week intervals until late summer or early fall. Reduced rates of Legacy should be considered in perennial ryegrass with high populations of *Poa annua* or when temporary *Poa annua* discoloration cannot be tolerated. For bermudagrass fairways overseeded with perennial ryegrass, applications of Legacy should be delayed until perennial ryegrass is well established (3 to 4 weeks after germination). Final spring application should be made a minimum of 4 weeks prior to expected bermudagrass green-up. Normal management practices such as fertilization, aeration and overseeding will encourage growth of perennial ryegrass.

**Storage and Disposal**

Nonrefillable container. **Do not** reuse or refill this container. Offer for recycling if available. **Do not** contaminate water, food, or feed by storage or disposal.

**Pesticide Storage:** Store in original container only. In case of leak or spill, contain material and dispose as waste.

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

**Container Disposal:** Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat the procedure two more times. Then offer the container for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**Table 2: Recommended Rate Ranges for *Poa annua* Suppression in Cool-season Perennial Turfgrass with Legacy Using a Multiple Application Program**

Turfgrass Species	% <i>Poa annua</i>	Initial Spring Application <sup>1</sup>	Repeat Applications <sup>1</sup>	
		Rate of Legacy /A (fl. oz./A)	Rate of Legacy /A (fl. oz./A)	Treatment Interval
Bentgrass (golf course fairway)	0 - 80%	8 to 15 fl. oz./A	8 to 20 fl. oz./A	2 to 6 weeks
Bentgrass putting greens	Less than 50%	5 to 10 fl. oz./A	5 to 10 fl. oz./A	2 to 4 weeks
Bentgrass putting greens	More than 50%	5 fl. oz./A	5 to 10 fl. oz./A	2 to 4 weeks
Kentucky Bluegrass/ Perennial Ryegrass Fairways Mixture	0 - 80%	15 to 25 fl. oz./A	15 to 30 fl. oz./A	2 to 6 weeks
Perennial Ryegrass <sup>2</sup>	0 - 80%	15 to 30 fl. oz./A	15 to 30 fl. oz./A	2 to 6 weeks

<sup>1</sup> Apply in early spring following resumption of active growth of the grass. Fall applications should be discontinued 4 weeks before the onset of inactive grass growth or winter dormancy.

<sup>2</sup> For perennial ryegrass overseeded fairways, applications should be delayed until perennial ryegrass is well established (3 to 4 weeks after germination). Final spring application should be made a minimum of 4 weeks prior to expected bermudagrass green-up.





## Warranty Disclaimer

SePRO Corporation warrants that the product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. To the extent consistent with applicable law, SEPRO CORPORATION MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

## Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of SePRO Corporation as the seller. To the extent consistent with applicable law, all such risks shall be assumed by buyer.

## Limitation of Remedies

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories) shall be limited to, at SePRO Corporation's election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

To the extent consistent with applicable law, SePRO Corporation shall not be liable for losses or damages resulting from handling or use of this product unless SePRO Corporation is notified in writing within twenty-one (21) days from the date of application of such losses or damages. In no case shall SePRO Corporation be liable for consequential or incidental damages or losses.

The terms of the *Warranty Disclaimer* above and this *Limitation of Remedies* can not be varied by any written or verbal statements or agreements. No employee or sales agent of SePRO Corporation or the seller is authorized to vary or exceed the terms of the *Warranty Disclaimer* or *Limitations of Remedies* in any manner.

