

# Edgeless® Concentrate

## Turf Growth Regulator

SPECIMEN



For edging and banding applications to control growth and reduce trimming requirements of perennial turfgrass species.

### Active Ingredients

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%  
TOTAL.....100.00%

Contains 1.10 pounds of flurprimidol per gallon of product.

Contains 0.41 pound 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.)

Refer to the inside of label booklet for additional precautionary information and Directions for Use, including First Aid and Storage and Disposal.

**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* at the end of the label booklet.

Edgeless is a registered trademark of SePRO Corporation  
SePRO Corporation

11550 North Meridian Street, Suite 600  
Carmel, IN 46032, U.S.A.

EPA Reg. No. 67690-62  
FPL20130603

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

### Keep Out of Reach of Children

## WARNING / AVISO

**Causes substantial but temporary eye injury. Harmful if swallowed. Avoid contact with skin or clothing. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves.**

### 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 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>

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.**

## 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 exist, 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.

## 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.

### Ground Water Advisory

This pesticide has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

### Surface Water Advisory

This product is classified as having potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs, will reduce the potential loading of flurprimidol from runoff and sediment.

## 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 carefully before applying. Use only according to label directions. before applying. Use only according to label directions.

## 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.**

### Avoiding Injurious Spray Drift

Applications should be made only when there is little or no hazard for spray drift. Very small quantities of spray, which may not be visible, may seriously injure susceptible plants. Do not spray when wind is blowing toward desirable susceptible crops or ornamental plants near enough to be injured. Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions.

## Product Information for Growth Regulation of Perennial Turfgrasses

Edgeless Concentrate integrates patented† synergy of turf growth regulator technology for use on both warm and cool-season perennial turfgrasses. Edgeless Concentrate reduces stem elongation and leaf

blade length in perennial turfgrasses resulting in a more compact and dense growth form and reduction in trimming requirements. Growth regulation from Edgeless Concentrate results from suppression of the plant hormone, gibberellic acid (GA), responsible for cell elongation in most plants.

Edgeless Concentrate's patented plant growth regulator (PGR) synergy results in growth suppression and extended spray intervals. Plant physiological advantages to applications of Edgeless Concentrate include:

1. **Multiple plant sites of uptake:** Edgeless Concentrate is absorbed by plants via roots, stems, and leaves; and
2. **Multi-site activity within gibberellic acid (GA) biosynthesis pathway:** Edgeless Concentrate 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.**

#### **Benefits of Edgeless Concentrate Applications to Turfgrass**

- Shoot growth suppression resulting in decreased trimming/edging frequency and clippings.
- Increased turfgrass density, wear tolerance, and enhanced color resulting in improved turf quality.
- Improved water use efficiency resulting in pre-drought stress conditioning.

**NOTICE TO USER:** Turfgrass responses to Edgeless Concentrate may vary within turfgrass species due to the large number of cultivars and varieties available. Neither the manufacturer nor seller has determined if Edgeless Concentrate 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 Edgeless Concentrate to a small test area to determine growth response and desired level of growth regulation prior to large scale applications.

#### **Use Precautions for Perennial Turfgrasses**

- **Edgeless Concentrate 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 for use on turfgrasses under stress.
- Applications of Edgeless Concentrate to newly seeded turfgrass should be delayed until turf is well established and actively growing.
- Edgeless Concentrate should not be applied until a minimum of 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 Edgeless Concentrate is tank mixed or used in conjunction with demethylation inhibiting (DMI) or sterol inhibiting fungicides.
- Do not apply to turf used for livestock production.
- Multiple applications of Edgeless Concentrate can be made yearly, but do not apply more than 350 fluid ounces (fl. oz.) of Edgeless Concentrate per acre per year (8 fl. oz. per 1,000 square feet per year).
- **Chemigation:** Do not apply Edgeless Concentrate through any type of irrigation system.

#### **Application Timing**

Applications of Edgeless Concentrate should be made to actively growing turfgrass. 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**

Best results are obtained if rainfall or irrigation occurs no sooner than 2 hours after application or until product has dried on the leaf surface but no longer than 24 hours after application. Avoid mowing turfgrass areas treated with Edgeless Concentrate until after rainfall or irrigation occurs.

#### **Turf Color and Post Treatment Turf Management**

Turfgrass treated with Edgeless Concentrate 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 depending on the rate applied. Treated areas should be managed to encourage the growth of a healthy vigorous turf.

#### **Application Directions**

##### **Mixing Directions**

Add Edgeless Concentrate to a spray tank half filled with clean water. Mix thoroughly. Finish filling the spray tank. Continue agitation throughout the spraying operation to ensure uniform application. Edgeless Concentrate should be applied using a single nozzle sprayer with an evenly distributed 6 inch band width calibrated to deliver 20 fl. oz. of spray solution per minute. In-line strainers and nozzle screens should be 50 mesh or larger. Performance may be improved with the addition of a readily available nitrogen (N) source at 0.125 to 0.5 lbs N/1,000 ft<sup>2</sup> or iron (Fe) at suggested label rates to the spray mix.

#### **EDGING APPLICATIONS FOR GROWTH REGULATION OF PERENNIAL TURFGRASS SPECIES**

Edgeless Concentrate can be applied to turfgrass in banded applications along the perimeter of lawns, landscape beds, sidewalks, curbs, parking lots, driveways, posts, mailboxes, building structures, gravestones, and fences to reduce the frequency of trimming and edging. For best results turfgrass should be trimmed to the desired height prior to application. Apply Edgeless Concentrate in a 6 inch band width using a single nozzle sprayer. Repeat at 8 to 12 week intervals or as needed to maintain turf growth regulation.

<b>Table 1</b>			
<b>Edgeless Concentrate Rate Ranges for Growth Regulation/Edging of Perennial Turfgrass</b>			
<b>Turfgrass Species</b>	<b>Fl. Oz. Edgeless Concentrate/500 linear feet (1)</b>	<b>Fl. Oz. Edgeless Concentrate/1000 linear feet (1)</b>	<b>Fl. Oz. Edgeless Concentrate/2000 linear feet (1)</b>
<b>Cool-Season Turfgrasses</b>			
Bentgrass	0.18-0.35	0.35-0.7	0.7-1.4
Kentucky Bluegrass	0.23-0.45	0.45-0.9	0.9-1.8
Perennial Ryegrass	0.23-0.45	0.45-0.9	0.9-1.8
Tall Fescue	0.23-0.45	0.45-0.9	0.9-1.8
<b>Warm-Season Turfgrasses</b>			
328 Hybrid Bermudagrass	0.13-0.23	0.25-0.45	0.5-0.9
419 Hybrid Bermudagrass	0.18-0.35	0.35-0.7	0.7-1.4
Centipedegrass	0.13-0.23	0.25-0.45	0.5-0.9
Common Bermudagrass	0.23-0.45	0.45-0.9	0.9-1.8
Seashore Paspalum	0.18-0.35	0.35-0.7	0.7-1.4
St. Augustinegrass	0.18-0.35	0.35-0.7	0.7-1.4
Zoysiagrass	0.18-0.35	0.35-0.7	0.7-1.4

(1): assumes 6 inch wide band.

In order to deliver the correct rate of Edgeless Concentrate to the desired turf species, users should properly calibrate their sprayer to determine spray volume.

## EQUIPMENT CALIBRATION FOR EDGING APPLICATIONS

Proper application rate, volume and placement are important to ensure efficacy with Edgeless Concentrate. SePRO recommends specific application equipment and spray techniques to maximize efficacy of Edgeless Concentrate. **All spray equipment must be properly calibrated before applying Edgeless Concentrate.** For optimum application, and to provide the best results, follow the 3 steps below:

**1. Determine Desired Rate (Fl. Oz./Linear feet) Based upon Targeted Turfgrass Species.** Use Table 1 to identify the proper use rate (use higher rates when environmental conditions favor vigorous growth of turfgrass species and when longer regulation is desired).

a. For example, apply 0.23-0.45 fl. oz. per 500 linear ft to effectively regulate Kentucky Bluegrass.

**2. Properly Calibrate Sprayer.** Follow instructions below for specific calibration recommendations to determine rates for single nozzle sprayers.

a. **Nozzle** – An even distribution nozzle is important for uniform coverage and resulting growth regulation. **SePRO recommends a TeeJet® 8002E nozzle or equivalent for applications of Edgeless Concentrate.**

b. **Pressure (PSI) at Nozzle** – Maintaining a consistent pressure at the spray nozzle is difficult with a single nozzle sprayer when using a backpack or other hand-held compression sprayers. In order to maintain a consistent pressure at the nozzle, SePRO recommends using a pressure regulating device to target approximately 20 PSI when using the TeeJet 8002E nozzle. **To target approximately 20 PSI, SePRO recommends the Chapin CFValve™ (Model CFV1X-R3-8BSP) designed to maintain 21 PSI.**

- **Sprayer/Nozzle Construction:** Remove the nozzle cap and nozzle and replace with the TeeJet 8002E nozzle. Next, thread the Chapin CFValve between the nozzle cap and the end of spray wand. The CFValve is designed to fit a 3/8" thread. Larger adapters (11/16") can be ordered from Chapin if needed.

c. **Height of Spray Tip** – Apply Edgeless Concentrate to target a 6 inch wide band with a single nozzle sprayer. **SePRO recommends the TeeJet 8002E nozzle which will apply Edgeless Concentrate in a 6 inch band when held at 3.5 inches above the canopy.** Some users may design a guide that extends 3.5 inches below the spray tip to better target the proper height.

d. **Walking Speed** – Edgeless Concentrate is to be applied while walking at a consistent speed and holding the boom steady over the turf surface. It must NOT be applied by moving the spray wand back and forth over an area – this will result in non-uniform regulation. **Edgeless Concentrate should be applied at 2, 2.5 or 3.0 mph (1 mile = 5,280 feet; 1 mph = 88 ft per minute).**

- To calibrate your walking speed, determine **how long in seconds it takes to walk 100 feet or 33 yards.** Use Table 2 to determine your walking speed and how many linear feet you will treat at that speed with 1 gallon of solution (spray coverage).

Walking Speed (mph)	Time (seconds) to walk 100 ft	Spray Coverage Per Gallon Spray Solution <sup>1</sup>
2.0	34	1,131 feet
2.5	27	1,405 feet
3.0	23	1,708 feet

<sup>1</sup> Assumes a 6-inch wide spray band and utilizing the TeeJet 8002E nozzle applied at approximately 20 PSI

**3. Calculate Amount of Edgeless Concentrate needed for 1 Gallon of water, based upon Walking Speed and Desired Use Rate.** Use the equation below to determine fluid ounces of Edgeless Concentrate to mix per gallon of water based upon walking speed and targeted spray rate. Use Table 1 (*Edgeless Concentrate Rates for Growth Regulation/Edging of Perennial Turfgrass*) to determine spray rate for a specific turf species.

$$\left( \frac{\text{Spray Coverage per gallon (Table 2)}}{\text{gallon of water}} \right) \times \left( \frac{\text{desired rate in fl oz (Table 1)}}{\text{desired treatment coverage in linear feet (Table 1)}} \right)$$

= fl oz Edgeless concentrate per gallon of water

**Example 1:**

To treat bentgrass at the rate of 0.7 fl. oz. per 1000 linear feet of Edgeless concentrate:

If you walk at a speed of 2 mph (100 ft in 34 seconds), and use the recommended settings, your sprayer will dispense 1 gallon of solution over 1,131 linear feet.

To achieve the desired treatment rate, the volume of Edgeless concentrate to add to 1 gallon of water is as follows:

$$\left( \frac{\text{linear feet}}{1 \text{ Gallon}} \right) \times \left( \frac{0.7 \text{ fl oz}}{1000 \text{ linear feet}} \right)$$

= 0.79 fl oz Edgeless concentrate per gallon of water

0.79 fl. oz. of Edgeless concentrate in 1 gallon of water will treat/cover a six inch band over 1,131 linear feet at your chosen rate of 0.7 fl. oz. per 1,000 linear feet using the sprayer calibration settings and your walking speed of 2 mph.

**Example 2:**

To treat 3200 linear feet of bentgrass at the rate of 0.6 fl. oz. per 1000 linear feet of Edgeless concentrate:

If you walk at a speed of 2.5 mph (100 ft in 27 seconds), and use the recommended settings, your sprayer will dispense 1 gallon of solution over 1,405 linear feet.

To achieve the desired treatment rate, the volume of Edgeless concentrate to add to 1 gallon of water is as follows:

$$\left( \frac{1405 \text{ linear feet}}{1 \text{ Gallon}} \right) \times \left( \frac{0.6 \text{ fl oz}}{1000 \text{ linear feet}} \right)$$

= 0.84 fl oz Edgeless concentrate per gallon of water

0.84 fl. oz. of Edgeless concentrate in 1 gallon of water will treat/cover 1,405 linear feet at your chosen rate of 0.6 fl. oz. per 1,000 linear feet using the sprayer calibration settings and your walking speed of 2 mph.

To treat 3200 linear feet, multiply the amounts of Edgeless concentrate (0.84 fl. oz.) and water (1 gallon) needed by 2.28 (3200 ÷ 1405). Therefore, add 1.9 fl. oz. to 2.28 gallons of water.

## STORAGE AND DISPOSAL

**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 the use of this product may be disposed of on-site or at an approved waste disposal facility.

### **Container Handling**

**Nonrefillable Container. DO NOT reuse or refill this container.** Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

**Triple rinse containers small enough to shake (capacity ≤ 5 gallons) as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

**Triple rinse containers too large to shake (capacity >5 gallons) as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

**Pressure rinse as follows:** Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**Refillable Container.** Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

**Triple rinse as follows:** To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transport. **DO NOT** transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.

## TERMS AND CONDITIONS OF USE

If terms of the following *Warranty Disclaimer*, *Inherent Risks of Use* and *Limitation of Remedies* are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, to the extent consistent with applicable law, use by the buyer or any other user constitutes acceptance of the terms under *Warranty Disclaimer*, *Inherent Risks of Use*, and *Limitation of Remedies*.

## 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 or 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 promptly notified of such losses or damages in writing. In no case shall SePRO Corporation be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use and this Limitation of Remedies cannot 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 this *Limitation of Remedies* in any manner.

©Copyright 2013 SePRO Corporation

Edgeless is a registered trademark of SePRO Corporation  
TeeJet is a registered trademark of Spraying Systems Co.  
CFValve™ is a trademark of GATE LLC.



**SePRO Corporation**  
11550 North Meridian Street, Suite 600  
Carmel, IN 46032, U.S.A.