



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Laurent Mezin SePRO Corporation 11550 N. Meridan Street, Suite 600 Carmel, IN 46032

SEP 0 1 2011

Subject:

SP5075 Turf Growth Regulator

EPA Reg. No. 67690-46

EPA Decision Number: 451446

Your label amendment submitted on June 7, 2011 and resubmitted on July 27, 2011 that includes minor reformatting, updates to Storage and Disposal language, and the

addition of specific equipment and calibration recommendations

Dear Mr. Mezin:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable, provided that you comply with the following condition:

1. In the Storage and Disposal sections, revise the heading "Container Disposal" to read "Container Handling" per PR Notice 2007-4.

One copy of the label stamped "Accepted with Comments" is enclosed for your records. This label supersedes all labels previously accepted for this product. Please submit one copy of the final printed label before the product is released for shipment. If you have any questions, please contact Heather Garvie by phone at: 703-308-0034 or via email at: garvie.heather@epa.gov.

Sincerely,

Shaja Joyner

Product Manager 20 Fungicide Branch Registration Division

Enclosure: Stamped label

[Base label for all containers]



SP5075

Turf Growth Regulator

ACCEPTED with COMMENTS In EPA Letter Dated SEP 0 1 2011

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.

FOR GROWTH MANAGEMENT AND QUALITY IMPROVEMENT OF PERENNIAL COOL AND WARM SEASON TURFGRASSES ON GOLF COURSES.

FOR EDGING AND BANDING APPLICATIONS TO CONTROL GROWTH AND REDUCE TRIMMING REQUIREMENTS OF PERENNIAL TURFGRASS SPECIES

Active Ingredients

| flurprimidol: α -(1-methylethyl)- α -[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 | |
| Contains 1.10 pounds of flurprimidol per gallon of product. Contains 0.41 pound of trinexapac-ethyl per gallon of product. | |

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

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 this label, find someone to explain it to you in detail).

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.

| FIRST AID | | |
|--------------|--|--|
| If in eyes | 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. Call a prison control center or destar for treatment advise. | |
| | Call a poison control center or doctor for treatment advice. | |
| If swallowed | Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. | |
| | Do not induce vomiting unless told to do so by a poison control center or doctor. | |
| | Do not give anything by mouth to an unconscious person. | |

| If on skin | Take off contaminated clothing. | | |
|--|---|--|--|
| or | Rinse skin immediately with plenty of water for 15 - 20 minutes. | | |
| clothing | Call a poison control center or doctor for treatment advice. | | |
| If inhaled | Move person to fresh air. | | |
| If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. | | | |
| | Call a poison control center or doctor for further treatment advice. | | |
| or going for | oduct container or label with you when calling a poison control center or doctor, treatment. In case of emergency endangering health or the environment is product, call INFOTRAC at 1-800-535-5053 | | |

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.

SP5075 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.

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 Disposal

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 lincineration, or by other procedures approved by state and local authorities.

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.

See attached booklet for complete container disposal directions including triple rinsing and pressure rinsing instructions.

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

Refer to inside of label booklet for additional precautionary information and directions for use.

Notice: Read the entire label before using. Use only according to label directions. Before buying or using this product, read *Terms and Conditions of Use, Warranty Disclaimer, Inherent Risks of Use* and *Limitation of Remedies* at the end of the label booklet. If terms are unacceptable, return at once unopened.

| EPA Reg. No. 67690-46 FPL20110727 | EPA Est. No SPC |
|--------------------------------------|--|
| SePRO Corporation 11550 N. | Meridian St., Ste. 600, Carmel, IN 46032 U.S.A. |
| Turf Growth Regulator | Net Contents [Denote Refillable or Nonrefillable container] |

[Front label, ALL containers]



SP5075

Turf Growth Regulator

FOR GROWTH MANAGEMENT AND QUALITY IMPROVEMENT OF PERENNIAL COOL AND WARM SEASON TURFGRASSES ON GOLF COURSES.

FOR EDGING AND BANDING APPLICATIONS TO CONTROL GROWTH AND REDUCE TRIMMING REQUIREMENTS OF PERENNIAL TURFGRASS SPECIES

| Active Ingredients | |
|--|---------|
| flurprimidol: α -(1-methylethyl)- α -[4-(trifluoromethoxy)phenyl]-5-pyrimidinemethanol | 13.26% |
| trinexapac-ethyl: 4-(cyclopropyl-alpha-hydroxymethylene)-3,5- | |
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| Other Ingredients | 81.74% |
| TOTAL | 100.00% |
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SPECIALTY CHEMICAL: Do not ship or store with food, feeds, drugs or clothing.

Refer to 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 *Terms and Conditions of Use, Warranty Disclaimer*, *Inherent Risks of Use* and *Limitation of Remedies* at the end of the label booklet. If terms are unacceptable, return at once unopened.

| EPA Reg. No. 67690-46 | EPA Est. No. |
|-----------------------|--------------|
| FPL20110727 | SPC |
| | |

SePRO Corporation 11550 N. Meridian St., Ste. 600, Carmel, IN 46032 U.S.A.

| Turf Growth Regulator | Net Contents |
|-----------------------|--|
| | [Denote Refillable or Nonrefillable container] |
| [Label booklet text] | |

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Keep Out of Reach of Children WARNING / AVISO

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.

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.

| 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. |
|--|
| Call a poison control center or doctor for treatment advice. |
| Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. |
| |

| If on skin | Take off contaminated clothing. |
|-------------|--|
| or | Rinse skin immediately with plenty of water for 15 - 20 minutes. |
| clothing | Call a poison control center or doctor for treatment advice. |
| If inhaled | Move person to fresh air. |
| | If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. |
| | Call a poison control center or doctor for further treatment advice. |
| Have the pr | oduct container or label with you when calling a poison control center or doctor, or |

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**.

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.

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

SP5075 integrates patented[†] synergy of turf growth regulator technology for use on both warm and cool-season perennial turfgrasses on golf courses. SP5075 reduces stem elongation and leaf blade length in perennial turfgrasses resulting in a more compact and dense growth form. Growth regulation from SP5075 results from suppression of the plant hormone, gibberellic acid (GA), responsible for cell elongation in most plants.

SP5075'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 SP5075 include:

- 1. <u>Multiple plant sites of uptake</u>: SP5075 is absorbed by plants via roots, stems, and leaves; and
- 2. <u>Multi-site activity within gibberellic acid (GA) biosynthesis pathway</u>: SP5075 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 SP5075 applications to provide the best turfgrass enhancement and reduce potential for discoloration.

Benefits of SP5075 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 SP5075 may vary within turfgrass species due to the large number of cultivars and varieties available. Neither the manufacturer nor seller has determined if SP5075 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 SP5075 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

- SP5075 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 due to temperature and moisture extremes and disease, and/or insect pressures.
- Applications of SP5075 to newly seeded turfgrasses should be delayed until turf is well
 established and actively growing.
- SP5075 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 SP5075 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 SP5075 can be made yearly, but do not apply more than 350 fl oz/A of SP5075 per acre per year.
- Chemigation: <u>Do not</u> apply SP5075 through any type of irrigation system.

Application Timing

Applications of SP5075 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 SP5075 until after rainfall or irrigation occurs.

Turf Color and Post Treatment Turf Management

Turfgrass treated with SP5075 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 SP5075 to a spray tank half filled with clean water while agitating. Allow sufficient mixing time to ensure consistent mixing of SP5075. Finish filling the spray tank. Continue agitation throughout the spraying operation to ensure uniform application. SP5075 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/1,000 ft²). 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/1,000 ft² or iron (Fe) at suggested label rates to the spray mix.

SP5075 + Tank Mixtures

SP5075 can be tank mixed and is compatible with most commonly-used pesticides and foliar nutrient products. However, compatibility of SP5075 with tank mix partners should be tested before use.

NOTE: It is recommended that the compatibility of SP5075 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.

SP5075 FOR GROWTH REDUCTION OF PERENNIAL TURFGRASS SPECIES

A multiple application program using SP5075 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 rates for growth regulation of perennial turfgrass species.

| Rate Ranges for Growth Regulation of Perennial Turfgrass Species With SP5075 Using a Multiple Application Program | | | | |
|---|--|--|--------------------|--|
| | Early Spring/Late Fall Applications | Repeat Applications | | |
| Turfgrass Species | Rate of SP5075 (fl. oz./A) ^{2,3} | Rate of SP5075 (fl. oz./A) ² | Treatment Interval | |
| Cool-Season Turfgrasses | | | | |
| Bentgrass (golf course fairway) | 10 - 15 | 10 - 20 | 2 to 6 weeks | |
| Bentgrass putting greens | 5 - 8 | 5 - 10 | 2 to 4 weeks | |
| Kentucky Bluegrass/ Perennial Ryegrass Mixture | 15 - 22 | 15 - 30 | 2 to 6 weeks | |
| Perennial Ryegrass ¹ | 15 - 22 | 15 - 30 | 2 to 6 weeks | |
| Warm-Season Turfgrasses | | | | |
| Seashore Paspalum | 10 - 15 | 10 - 20 | 2 to 6 weeks | |
| Tifway Bermudagrass | 10 - 15 | 10 - 20 | 2 to 6 weeks | |
| TifSport Bermudagrass | 8 - 12 | 8 - 16 | 2 to 6 weeks | |
| Zoysiagrass | 8 - 12 | 8 - 16 | 2 to 6 weeks | |

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.

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

SP5075 FOR *POA ANNUA* (ANNUAL BLUEGRASS) CONVERSION TO PERENNIAL TURFGRASSES

A growth regulation program using SP5075 suppresses *Poa annua* in cool season turfgrasses. Research has demonstrated that programmed applications of SP5075 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 SP5075, especially during temperature extremes. To maximize seedling establishment during interseeding or overseeding practices, applications of SP5075 should be delayed 10 to 14 days prior to and/or after date of seeding. For more aggressive *Poa annua* conversion, users should consider programmed applications of Cutless 50W or Cutless MEC at labeled rates and timings for the desired turfgrass species. Refer to Table 2 for rates for *Poa annua* suppression in cool-season turfgrasses using SP5075.

• Bentgrass (golf course fairway)

Apply SP5075 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 SP5075 should be made at 2 to 6 week intervals until late summer or early fall. Reduced rates of SP5075 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 interseeding/overseeding will encourage growth of bentgrass.

Bentgrass Putting Greens

Annual turfgrass species, such as *Poa annua* are more strongly regulated by applications of SP5075 often resulting in transitory yellowing or temporary discoloration. Therefore, reduced rates of SP5075 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 SP5075 throughout the growing season will suppress *Poa annua* populations, resulting in increased populations of bentgrass. Follow normal management practices such as fertilization, aeration and interseeding/overseeding that encourage growth of bentgrass. Use of SP5075 on bentgrass greens may increase putting speed without reducing the height of cut.

O Bentgrass Greens with less than 50% Poa annua (Annual Bluegrass): Apply SP5075 to bentgrass as part of an overall greens management program both for growth regulation and Poa annua suppression. An initial application of SP5075 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 SP5075 should be made at 2 to 4 week intervals through early fall.

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

Sentgrass Greens with more than 50% Poa annua (Annual Bluegrass): Apply SP5075 to bentgrass as part of an overall greens management program both for growth regulation and Poa annua suppression. An initial application of SP5075 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 SP5075 should be made at 2 to 4 week intervals through early fall.

Kentucky bluegrass, Perennial ryegrass Mixtures

Apply SP5075 for *Poa annua* suppression in fairway height Kentucky bluegrass and perennial ryegrass mixtures 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 SP5075 should be made at 2 to 6 week intervals until late summer or early fall. Reduced rates of SP5075 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 interseeding/overseeding will encourage growth of bluegrass and/or ryegrass.

Perennial ryegrass

Apply SP5075 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 SP5075 should be made at 2 to 6 week intervals until late summer or early fall. Reduced rates of SP5075 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 SP5075 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 interseeding/overseeding will encourage growth of perennial ryegrass.

| Rate Ranges for <i>Poa annua</i> (Annual Bluegrass) Conversion to Cool-Season Perennial Turfgrasses with SP5075 Using a Multiple Application Program | | | | |
|--|---------|----------------------------|----------------------------------|--------------------|
| | % Poa | Initial spring application | Repeat applications ¹ | |
| Turfgrass Species | annua | | Rate of SP5075 (fl. oz./A) | Treatment Interval |
| Bentgrass (golf course fairway) | 0 - 80% | 8 - 15 | 8 - 20 | 2 to 6 weeks |
| Bentgrass Putting Greens | < 50% | 5 - 10 | 5 - 10 | 2 to 4 weeks |
| Bentgrass Putting Greens | > 50% | 5 | 5 - 10 | 2 to 4 weeks |
| Kentucky Bluegrass/ Perennial Ryegrass Fairways Mixture | 0 - 80% | 15 - 22 | 15 - 30 | 2 to 6 weeks |
| Perennial Ryegrass ² | 0 - 80% | 15 - 22 | 15 - 30 | 2 to 6 weeks |

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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. 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.

DOLLAR SPOT (SCLEROTINIA HOMEOCARPA) SUPPRESSION BY SP5075 IN CREEPING BENTGRASS

One of active ingredients in SP5075 is from the pyrimidine class of chemistry which is structurally similar to pyrimidine fungicides that provide Dollar Spot control. Programmed applications of SP5075 for turf growth suppression or for slowing the encroachment of *Poa annua* have also been shown to suppress Dollar Spot incidence in creeping bentgrass fairways, greens and tees. Research results have shown that SP5075 applications at labeled rates and application intervals can significantly reduce Dollar Spot incidence and populations when compared to untreated control plots. SP5075 should not be used to replace labeled fungicides for the control of Dollar Spot; rather, programmed use of SP5075 may result in longer or improved control of Dollar Spot in conjunction with conventional fungicides, or delays in the appearance of Dollar Spot disease, thus leading to the potential for an overall reduction in annual fungicide use.

EDGING AND BANDING APPLICATIONS FOR GROWTH REGULATION OF PERENNIAL TURFGRASS SPECIES

SP5075 can be applied to turfgrass in edging and banding applications along the perimeter of lawns, landscape beds, sidewalks, curbs, parking lots, driveways, posts, mailboxes, building structures, gravestones, and fences. SP5075 must be applied in a 6 inch band width with a single nozzle sprayer. Repeat at 8 to 12 week intervals or as needed for turf growth regulation.

| SP5075 Edging/Banding Rates for Growth Regulation of Perennial Turfgrass | | | |
|--|------------------|--|--|
| Turfgrass Species | Fl. Oz. SP5075/A | | |
| Cool Season Turfgrasses | | | |
| Bentgrass | 30 - 60 | | |
| Kentucky Bluegrass | 40 - 80 | | |
| Perennial Ryegrass | 40 - 80 | | |
| Tall Fescue | 40 - 80 | | |
| Warm Season Turfgrasses | | | |
| 328 Hybrid Bermudagrass | 20 - 40 | | |
| 419 Hybrid Bermudagrass | 30 - 60 | | |
| Centipedegrass | 20 - 40 | | |
| Common Bermudagrass | 40 - 80 | | |
| Seashore Paspalum | 30 - 60 | | |
| St. Augustinegrass | 30 - 60 | | |
| Zoysiagrass | 30 - 60 | | |

In order to deliver the correct rate of SP5075 to the desired turf species, users should properly calibrate their sprayer to determine spray volume in gallons per acre. Following proper calibration, use Table 4 to determine fluid ounces of SP5075 per 1 gallon of water required to apply the targeted rate found in Table 3 at various spray volumes.

| Table 4 Fluid Ounces of SP5075 Per Gallon of Water Required to Apply Targeted Rates of SP5075 at Various Spray Volumes. | | | | | | | | |
|---|--------|--------------|-----------------------|----------------------|--------|-----|--------|--|
| Target Rate of SP5075 (FI oz./A) | 20 GPA | Ga 30 GPA | Ilon Per Ac 40 GPA | re (GPA) S 50 GPA | 60 GPA | | 80 GPA | |
| 20 | 1.0 | 0.7 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | |
| 30 | 1.5 | 1.0 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | |
| 40 | 2.0 | 1.3 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | |
| 50 | 2.5 | 1.7 | 1.3 | 1.0 | 0.8 | 0.7 | 0.6 | |
| 60 | 3.0 | 2.0 | 1.5 | 1.2 | 1.0 | 0.9 | 0.8 | |
| 70 | 3.5 | 2.3 | 1.8 | 1.4 | 1.2 | 1.0 | 0.9 | |
| 80 | 4.0 | 2.7 | 2.0 | 1.6 | 1.3 | 1.1 | 1.0 | |

EQUIPMENT CALIBRATION FOR EDGING AND BANDING APPLICATIONS

Proper application rate, volume and placement are important to ensure efficacy with SP5075. SePRO recommends specific application equipment and spray techniques to maximize efficacy of SP5075. All spray equipment must be properly calibrated before applying SP5075. For optimum application, and to provide the best results, follow the 3 steps below:

- 1. Determine Desired Rate (FI. Oz./A) Based upon Targeted Turfgrass Species. Use Table 3 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 40 to 80 ounces per acre to effectively regulate Kentucky Bluegrass.
- Properly Calibrate Sprayer in Gallons Per Acre (GPA). Follow instructions below for specific calibration recommendations to determine GPA 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 for applications of SP5075.
 - 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 8002E nozzle. To target approximately 20 PSI, SePRO recommends the Chapin CFValve™ (Model CFV1X-R3-8BSP) designed to maintain 21 PSI.
 - <u>Sprayer/Nozzle Construction</u>: Remove the nozzle cap and nozzle and replace with the 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 (www.chapinmfg.com) if needed.

- c. <u>Height of Spray Tip</u> SP5075 must be applied at a 6 inch wide band with a single nozzle sprayer. SePRO recommends the 8002E nozzle which will apply SP5075 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 SP5075 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 nonuniform regulation. SP5075 should be applied at 2, 2.5 or 3.0 mph.
 - To calibrate your walking speed, determine how long in seconds it takes to walk 100 feet or 33 yards. Use Table 5 to determine your walking speed and resulting Gallons Per Acre (GPA). Additionally, Table 5 shows the approximate linear feet that could be treated per gallon of spray solution (assumes 6-inch wide spray band).

| Table 5 Walking Speed for Determining GPA and Treatable Linear Feet using SP5075 | | | | | | |
|--|----------------------------------|-------------------|--|--|--|--|
| Walking Speed (mph) | Time (seconds) to walk 100 ft | Gallons Per Acre* | Treatable Linear Feet Per Gallon Spray Solution ¹ | | | |
| 2.0 | 34 | 77 | 1,131 feet | | | |
| 2.5 | 27 | 62 | 1,405 feet | | | |
| 3.0 | 23 | 51 | 1,708 feet | | | |

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

3. Dilute your Spray Solution Based upon Walking Speed and Desired Use Rate. Use Table 6 (dilution chart) to determine fluid ounces of SP5075 to mix per gallon of water based upon walking speed and targeted spray rate. Use Table 3 (SP5075 Edging/Banding Rates for Growth Regulation of Perennial Turfgrass) to determine spray rate for a specific turf species.

| | | Table 6 - | - Dilutio | n Chart | | | | |
|--|---|-----------|-----------|---------|-----------|------|-----------|------|
| Fluid Ounces of SP50 SP5075 at Various Sp | | | | | | | | |
| Walking Speed (mph) | GPA ² SP5075 Rate (fl oz/A) (see SP5075 Rates in Table | | | | | | able 3) | |
| | | 20 | 30 | 40 | <u>50</u> | 60 | <u>70</u> | 80 |
| 2 | 77 | 0.26 | 0.39 | 0.52 | 0.65 | 0.78 | 0.91 | 1.04 |
| 2.5 | 62 | 0.32 | 0.48 | 0.65 | 0.81 | 0.97 | 1.13 | 1.29 |
| 3 | 51 | 0.39 | 0.59 | 0.78 | 0.98 | 1.18 | 1.37 | 1.57 |

^{*} For single nozzle sprayers calibrated at different GPA than shown below, refer to Table 4 for more dilution specifications

² For single nozzle sprayers calibrated at different GPA than shown below, refer to Table 4 for more dilution specifications.

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 Disposal

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.

¹ Assumes using the TeeJet 8002E Nozzle applied at approximately 20 PSI and a 6-inch wide spray band for all calculations.

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.

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- (2) Replacement of amount of product used.

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