

Pro PGR

A plant growth regulator to manage the growth of fine and amenity turf in golf courses, sport fields, parks and other turfgrass areas.

WARNING - Keep out of reach of children

Active Ingredient:

Pro PGR contains 120 g/litre trinexapac-ethyl in the form of a micro-emulsifiable concentrate.

Net Contents: 500ml to 1 litre

*Approved pursuant to the HSNO Act 1996, Approval Code HSR100371
See www.epa.govt.nz for approval controls.*

Syngenta Crop Protection Limited

Tower 2, Level 7, 110 Symonds Street, Auckland Pro PGR 25.11.14 Page 2 of 4

PLEASE READ THE LABEL COMPLETELY BEFORE USE

This product MUST NOT be used for any purpose or in any manner contrary to the controls of this approval.



WARNING

Combustible liquid.
May be harmful if swallowed
Causes serious eye irritation
Harmful to aquatic organisms.

PRECAUTIONS

Store in original container, tightly closed, away from foodstuffs.

Keep away from sources of ignition. In case of fire use fine-water spray or foam. During a fire this product may release smoke and hazardous decomposition products. When fighting a major fire wear an air-supplied respirator.

When mixing or applying wear protective clothing, including overalls, impervious gloves, face shield and footwear.

DO NOT eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work.

If medical advice is needed have container or label at hand.

IF SWALLOWED call a poison centre or doctor if you feel unwell. Rinse mouth.

IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Apply with well-maintained and calibrated spray equipment.

DO NOT re-enter site until spray has dried.

Application and storage should be as described in the Management of Agrichemicals NZS8409.

DO NOT carry on a passenger service vehicle.

Avoid contamination of any water supply with chemical or empty container

Container disposal: Ensure the container is empty. Triple rinse the container and add rinsate to the spray tank. Recycle empty container through Agrecovery (0800247326, www.agrecovery.co.nz). Otherwise crush and bury in a suitable landfill. DO NOT reuse this container for any other purpose.

Product disposal: Dispose of this product only by using according to the label, at an approved landfill or other approved facility.

FIRST AID

If swallowed, DO NOT induce vomiting. For advice, contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if breathing has stopped. Use mouth to nose rather than mouth to mouth. Obtain medical attention. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. DO NOT scrub the skin. If splashed in the eyes, wash out immediately with water. If inhaled, move the victim to fresh air immediately.

SPILLAGE

Wear suitable protective clothing including face shield, impervious gloves and boots. Prevent the product or spilled material from entering water bodies. Absorb liquid spills with inert material such as earth or sand and place in waste containers. Wash area with water and absorb with further inert material. Dispose of safely.

GENERAL INFORMATION

PRO PGR for turf growth management reduces the frequency of mowing and the amount of grass clippings by reducing the growth of warm- and cool-season turfgrasses. Other benefits, such as increased turf density, increased color, and increased turf quality, are frequently observed after PRO PGR applications.

PRO PGR can be applied to well-maintained, quality turfgrass areas, such as residential and commercial lawns, golf courses, sod farms, sports fields, cemeteries, and similar areas.

PRO PGR is useful in the management of difficult-to-mow areas and can be used to minimize the need for edging turf grass along sidewalks, curbs, parking lots, driveways, flower beds, fences and around posts, storage sheds, and trees.

PRO PGR should be applied to actively growing turf, at least 6 hours before or after mowing. Good mowing management leading up to application is required to achieve a good quality turf surface and to obtain the best results from PRIMO MAXX.

PRO PGR reaches the growing point by foliar uptake and is rainfast from rainfall or irrigation after one hour. Watering-in is not necessary for activation.

DIRECTIONS FOR USE

DO NOT apply to turf recovering from wear, renovation or turf affected by disease, water-logging or other stresses

DO NOT use where growth regulatory effects are likely following the application of a fungicide or any other material

DO NOT apply to turf going into or coming out of dormancy

Turf Growth Management

Situation	Grasses	Rate		Critical Comments
		per ha	per 100 m ²	
Golf courses and bowling greens	Bent Grass	450 mL to 1L	4.5 to 10 mL	Apply PRIMO MAXX at least 6 hours before or after mowing and when turf is actively growing. Use the lower rates on turf with moderate growth rates where a lower level of growth regulation is required, or when used in a program. Apply rates towards the highest end of the rate range when growth is vigorous or when longer periods of up to 6 weeks regulation is required.
	Bent Grass / <i>Poa annua</i> mixture	500 mL	5 mL	
	Hybrid Couch Tifdwarf	225 mL	2.3 mL	
	Hybrid Couch Tifgreen (328)	450 mL	4.5 mL	
Golf course fairways	Bent Grass	800 mL	8 mL	Application made to turf growing under cool conditions or to turf with low nutrient levels or where growth rates are low may result in discoloration. Well maintained turf surfaces are those which receive at least weekly mowing and good levels of water and fertility are maintained. Refer to Application section for detailed information.
	Kentucky Bluegrass			
	Bentgrass / <i>Poa annua</i> mixture	1.6 L	16 mL	
	Kentucky Bluegrass / Ryegrass / <i>Poa annua</i> mixture			
	Perennial Ryegrass	1.6 to 3 L	16 to 30 mL	
	Common Couch	0.8 to 1.6 L	8 to 16 mL	
	Hybrid Couch including Tifdwarf, Tifgreen (328) and Tifway (419)	650 to 800 mL	6.5 to 8 mL	
	Kikuyu	1.6 to 4 L	16 to 40 mL	
	Zoysia	450 mL	4.5 mL	

Golf course roughs, well maintained lawns and general turf surfaces	Bent Grass	2.4 L	24 mL	
	Kentucky Bluegrass / Fescue / Ryegrass mixtures			
	Tall Fescue			
	Kentucky Bluegrass	2 L	20 mL	
	Annual & Perennial Ryegrasses	3.2 L	32 mL	
	Buffalo Grass	1 to 2 L	10 to 20 mL	
	Common Couch			
	Hybrid Couch			
	Kikuyu	1.6 to 6 L	16 to 60 mL	
	Zoysia	800 mL	8 mL	
	Bunker facing, path and garden edging, footpath and curbside edging, fence lines, around trees	Bent Grass, Couch, Perennial Ryegrass	4 to 6 L	
Fescue				
Annual & Perennial Ryegrass				
Kentucky Bluegrass		2.4 L	24 mL	
Buffalo Grass		4 L	40 mL	
Couch				
Kikuyu		6 to 8 L	60 to 80 mL	
Zoysia	2.4 L	24 mL		

GROWTH REGULATION

The recommended use rates are designed to give approximately a 20 to 50% reduction in clippings over a 2 to 6 week period. In practice the amount of growth regulation achieved will vary between situations due to environmental conditions and management practices. To some extent, therefore, application rates will need to be adjusted to match growing conditions, management practices and the amount of growth regulation required by the turf manager.

Repeat applications can be made as soon as turf resumes growth or more suppression is required.

WINTER GRASS (*POA ANNUA*) MANAGEMENT

Different grasses vary in their sensitivity to PRIMO MAXX. Since *Poa annua* is more sensitive to PRO PGR than Bent Grass, PRO PGR can be used to reduce the competitiveness of *Poa annua* in Bent Grass golf greens. PRO PGR can be integrated into existing *Poa annua* control programs. Low rates of PRO PGR (that provide growth suppression of *Poa annua*, but not Bent Grass) applied during peak growth periods may enable a slow transition in the golf green sward composition away from *Poa annua* and towards a higher percentage of Bent Grass.

COUCH OVERSEEDING

An application of PRO PGR to couch will enhance the establishment of cool season turf grasses. PRO PGR is foliar absorbed, so germination and seedling growth is not affected.



Apply PRO PGR before verticutting, scalping, spiking or other similar operations to the couch. Apply PRO PGR 1 to 5 days before seeding.

TURF PRE-STRESS CONDITIONING

Multiple PRO PGR applications along with cultural practices such as fertilization, irrigation, drainage, mowing height, etc., will delay the onset of stress, improve stress survival, and enhance turf's recovery from stress. Apply PRO PGR to healthy, actively growing turf before the onset of stress and continue to apply PRO PGR throughout the growing season as long as the turf remains healthy. Turfgrass root-mass is often greater in PRIMO MAXX-treated turf than in similar, untreated turf. As turf top growth slows, energy is redirected to below-ground plant parts, and root and rhizome production increases. Research has demonstrated that PRO PGR may also enhance the performance of fungicides. Monthly applications of PRO PGR at the label rate or biweekly applications at $\frac{1}{2}$ the label rate strengthen the turfgrass to help it resist disease. In addition, if mowing is less frequent, and leaf material removal is reduced, contact and systemic products stay at effective concentrations on or in the turf longer. Multiple applications of PRO PGR will reduce water use and improve drought tolerance. PRO PGR applications result in smaller, more compact turfgrass and leaf area is reduced for transpiration. Increased turf density reduces moisture loss from soil evaporation, and additional soil moisture

is available due to increased root depth and mass. PRO PGR also may increase carbohydrate levels which have been shown to enhance heat and cold tolerance.

APPLICATION NEAR AND AROUND MONUMENTS AND HARDSCAPE MATERIALS

PRIMO MAXX, at normal dilution rates, will not stain brass, bronze, concrete, marble, granite, or other types of stone. Before using PRO PGR around other materials, test on a small scale basis first.

APPLICATION WITH TURF MARKING PAINT

PRO PGR can extend the duration of marking visibility when applied before or with marking paints. Mix PRO PGR with water first when combining with latex-based marking paints. Refer to the marking agent's product label for further instructions. Apply PRO PGR at 32 mL /100m² of line surface area.

MIXING

PRO PGR is a micro emulsion concentrate (ME) with minimal odour as the product does not contain petroleum solvents. PRO PGR mixes completely with water and may be tank mixed with many commonly used fungicides and liquid fertilizers. Add the required quantity of PRO PGR directly to a spray tank containing $\frac{2}{3}$ of the required spray volume. Add the rest of the water and ensure the mix is thoroughly agitated before application.

EQUIPMENT

Ensure even application in order to achieve even growth reduction. Avoid overlapping sprays.

Application Volume: Apply in 100 to 500 L/ha water, using suitable flat fan nozzles (refer to Critical Comments for specific nozzle recommendations). Application volume should be adequate to ensure thorough and even coverage of the turf leaves and penetration to the crowns. In higher cut turf (≥ 15 mm) a significant spray shielding effect can occur, impacting negatively on spray penetration and even coverage at low application volumes.

Knapsack: It is important to apply the correct quantity of PRO PGR to a known area of turf. Apply between 2 and 10 L water/100 m² turf. Preferably use flat fan nozzles and ensure even coverage is achieved.

Golf Courses and Bowling Greens: Ensure product placement as uniformly onto leaves and into crowns as possible. Ideal application volume should be 350-500 L/ha. For best results use medium [XR Teejet® (11004 or 11005)] to course [Turbo Teejet® or AIXR

Teejet® (11004 or 11005)] nozzles, at 5km/h and 3 bar pressure. Boom height should not exceed 50 cm above the ground.

All Other Turf Areas: Ensure product placement as uniformly onto leaves and into crowns as possible. Ideal application volume should be 200-500 L/ha. For best results use medium [XR Teejet* (11004 or 11008)] to course [Turbo Teejet* or AIXR Teejet* (11004 or 11008)] nozzles, at 8 km/h and 3 bar pressure. Boom height should not exceed 50 cm above the ground.

COMPATIBILITY For Couch, Hybrid Couch and Kikuyu turf grasses only

PRO PGR is compatible with some formulations of products containing the following chemicals: 2,4-D amine, bromoxynil, MCPA/bromoxynil/dicamba, MCPA ester/bromoxynil, MCPA ester/bromoxynil/dicamba, MCPP/2,4-D amine/dicamba or MCPP/dicamba. However, some transient discolouration of the treated turf may occur after application of a tank mix. For the treatment of broadleaf weeds in turf with herbicides other than those indicated above, it is recommended to apply PRO PGR and the broadleaf weed herbicides separately, allowing at least 10 days between an application of PRO PGR and the broadleaf weed herbicide.

Re-entry Period

DO NOT enter treated areas without protective clothing until spray has dried. DO NOT allow the public to enter treated areas until spray has dried.

STORAGE

Store in a cool, dry place, avoiding temperatures below 5°C and above 35°C. See Safety Data Sheet for additional storage information. Stores containing quantities of 10,000 litres or more require signage and 1000 litres or more require secondary containment. Stores with quantities of 500 litres or more require fire extinguishers.

SAFETY DATA SHEET

If additional hazard or safety information is required, refer to the Safety Data Sheet. For a copy visit our website at www.syngenta.co.nz

DISCLAIMER

This product complies with the specifications in its statutory registration. Implied terms and warranties are excluded. Syngenta's liability for breach of the express or any non-excludable implied warranty is limited to product replacement or purchase price refund. The purchaser must determine suitability for intended purpose and take all proper precautions in the handling, storage and use of the product including those on the label and/or safety data sheet failing which Syngenta shall have no liability

***Trademark** Product names marked ® or ™, the ALLIANCE FRAME the SYNGENTA Logo and the PURPOSE ICON are Trademarks of a Syngenta Group Company.

UN 3082
 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 (trinexapac-ethyl)
 PACKING GROUP III, HAZCHEM 2X
 CONTAIN SPILLAGE



In a transport emergency dial 111, Police or Fire Brigade
 For specialist advice in an emergency only, call 0800 734 607 (24 hours)