

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

May 7, 2015

Carrie Tackema Regulatory Manager Nufarm 4020 Aerial Center Parkway, Suite 101 Morrisville, NC 27560

Subject: Notification per PRN 98-10 – Fixing Typo. Product Name: GWN-6010 Plant Growth Regulator EPA Registration Number: 1001-91 Application Date: 3-10-15 Decision Number: 502362

Dear Ms. Tackema:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, please contact Erik Kraft by phone at 703-308-9358, or via email at <u>kraft.erik@epa.gov</u>.

Sincerely,

the for

Heather Garvie, Product Manager 24 Fungicide and Herbicide Branch Registration Division (7505P) Office of Pesticide Programs

Enclosure



1001-91

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

05/07/2015

GWN-6010 Plant Growth Regulator

[Alternate Brand Name: ANUEW™]

For managing growth, improving quality and stress tolerance of turf.

ACTIVE INGREDIENT: Prohexadione calcium	
[calcium 3-oxido-5-oxo-4-propionylcyclohex-3-enecarboxylate]	
OTHER INGREDIENTS	
TOTAL	

KEEP OUT OF REACH OF CHILDREN CAUTION

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.

See Booklet For FIRST AID and PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300 For Medical Emergencies Only, Call (877) 325-1840



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MANUFACTURED FOR Cleary Chemicals, LLC 11901 S. Austin Ave Alsip, IL 60803

EPA Reg. No. 1001-91 EPA Est. No. _____

Net Contents: ____ Pounds

	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 poison control center or doctor for treatment advice. 	
IF ON SKIN OR CLOTHING	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment' advice. 	
HOTLINE NUMBER		

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals CAUTION

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

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 A on the EPA chemical-resistance category selection chart. •

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Shoes plus socks

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

Engineering Controls Statement

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

User Should:

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

ENDANGERED SPECIES CONCERNS

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of Federal Law.

AGRICULTURAL USE REQUIREMENTS

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

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Do not enter treated areas without footwear until sprays have dried.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

All applicable directions, restrictions, precautions and **Conditions of Sale and Warranty** are to be followed.

GENERAL INFORMATION

ANUEW is a tool for plant growth management. It works by inhibiting the biosynthesis of gibberellin, resulting in a decrease in cell elongation and a slowing of vertical growth.

Turf: In turfgrass inhibiting the biosynthesis of giberellin results in a reduction of both the mowing frequency and the amount of grass clippings in the treated area. ANUEW reduces clippings within 3 days. The turfgrass treated with ANUEW grows in a more compact form, often resulting in the enhancement of its color and quality. ANUEW is active through foliar uptake and is not taken up by the plant from the soil therefore, when applying it is important to use enough spray volume to thoroughly wet the turfgrass leaves without significant runoff. This product is rainfast within 1 hour. ANUEW is most effective when used on actively growing, well-maintained turf. The risk of scalping may be reduced on turfgrass areas treated with ANUEW. It can be applied to golf course fairways, tees, greens and roughs, residential and commercial lawns, sod farms, sports fields, cemeteries, and similar areas.

NOTICE TO USER: Turf tolerance to ANUEW has been found to be acceptable for the turf species listed on this label. Due to the large number of species, cultivars and growing situations, it is impossible to test every one for tolerance, efficacy and plant safety to ANUEW. Neither the manufacturer nor the seller has determined whether or not ANUEW can be used safely on turf species not specified on this label. For these turf species, the professional user should determine if ANUEW can be utilized effectively and safely prior to large scale commercial use. Before using ANUEW on turf species not listed on this label, test ANUEW on a small scale first. Start with the lowest recommended rate and evaluate the treated turf for plant safety and effective growth regulation prior to widespread use.

PRECAUTIONS AND LIMITATIONS

- Do not use on food crops.
- Do not apply ANUEW through any irrigation/chemigation system.
- Do not apply more than 26 oz per 1000 square feet of ANUEW per year.
- Under certain environmental conditions, such as those that might occur early in the season, transient bronzing may be observed.

- Do not use under growing conditions not ideal for good turfgrass or plant growth (for example, extremes in temperature, moisture, or pest pressure.)
- ANUEW may be used on sodded or sprigged turf after it has knitted down and rooted firmly.
- Do not graze treated areas or feed clippings to livestock.
- Do not apply ANUEW to grass grown for seed.

USE DIRECTIONS / APPLICATION METHODS FOR TURFGRASS

See the ANUEW Application Rates Table for ANUEW application rates, which can be used for growth management and turfgrass color and quality enhancement.

ANUEW performance can be affected by many factors, including environmental conditions, turf vigor and growth stage, soil moisture, fertility levels, and other cultural practices that affect plant growth.

Application Timing:

Apply ANUEW when the turf is green and actively growing. Delay the application or use a lower rate of ANUEW as designated in the ANUEW Application Rates Table if the turf is entering stressful growing conditions, such as pest pressure, high temperatures, low moisture conditions or certain cultural practices such as, but not limited to, aerification or verticutting. Repeat applications of ANUEW may be made as noted in the ANUEW Application Rates Table.

Spray Preparation:

Apply ANUEW in a sufficient volume of water to provide uniform and complete wetting of the turfgrass foliage. 0.5 to 5 gallons water/1,000 sq ft may be used, however, for best results 1-2 gallon water/1,000 sq ft is recommended.

Adjuvants: Use of a non-ionic surfactant in the spray mixture may improve coverage of the turf foliage and product performance consistency. Follow the manufacturer's label rate recommendation.

Hard Water: If the water source used for the spray mixture is high (greater than 40 ppm or 40 mg/l) in calcium, add 1 pound of ammonium sulfate for every pound of ANUEW used in the spray tank. Use a high quality, spray-grade ammonium sulfate product to avoid nozzle plugging.

Compatibility Test for Tank Mix: All possible tank mixes have not been evaluated for safety and/or physical compatibility. Tank mix user assumes all risk.

A jar test can be used to evaluate the physical compatibility of components to be mixed in a spray tank with ANUEW before making an application. Use a clear glass quart jar with lid by mixing components in the order shown below under "Mixing Order" in the same relative proportions as it will be used in the spray tank. Cap the jar and invert 10 cycles after adding each component. After all ingredients have been added, let the mixture stand for 15 minutes. Visually, evaluate the suspension for uniformity and stability. The spray mixture should not have particles that precipitate to the bottom of the jar, nor have any oily films or layers visible at the surface, nor contain flakes, balls, or sludge-appearing particles. If the spray mixture doesn't stay uniform in appearance, it is not compatible and the combination should not be used in a tank mix.

Mixing Order:

- Water Fill a clean spray tank half full with water and begin continuous agitation.
- **Products in PVA bags** Place any product contained in water-soluble PVA bags (VVSB) into the mixing tank. Wait until all water-soluble bags have fully dissolved and the product is evenly mixed in the spray tank before adding any further products.
- ANUEW and water-dispersible products (WDG; DF), wettable powders (WP), and suspension concentrates (SC) Add to the spray tank while maintaining agitation
- Adjuvants Includes non-ionic surfactants
- · Water-soluble products Includes micro emulsion products
- Emulsifiable concentrates (EC)
- Water-soluble additives Includes ammonium sulfate
- · Remaining quantity of water

Agitate spray tank mixture constantly during application. Prepare sufficient quantity of product for the immediate application needs. The spray tank mix should not be allowed to sit for prolonged periods without agitation. Do not leave product mix in the tank overnight.

Calcium or boron-containing products should not be added to the spray mixture. These products will reduce the activity of ANUEW.

Mowing and Irrigation:

Before application: Wait at least one hour after mowing before applying ANUEW.

After application: For best results-wait at least one day after applying ANUEW before resuming mowing and do not irrigate treated area for 4 hours after application.

Program Scheduling: Turfgrass areas treated with ANUEW should continue to be maintained normally using proper irrigation, fertility, and pest control product when necessary. Precaution is advised when tank mixing with ANUEW. The spray mixture should be applied on a small area first as a test before treating larger areas.

Conditions for Best Performance of ANUEW: Treated turfgrass is actively growing

- * Use a non-ionic surfactant to help improve leaf coverage and plant uptake of the active ingredient
- * Maximize the time the applied spray mixture remains as a moist film on the turfgrass foliage by avoiding treatments during warm, low humidity, and windy conditions. Longer drying times enhance absorption of ANUEW.

	Slows Vertical Growth, Reduces Mowing, Improves Color and Quality			
	FAIRWAYS AND ROUGHS (2-4 week interval)		GREENS AND TEES (1-2 week interval)	
	oz/acre oz/1,000 sq ft		oz/acre	oz/1,000 sq ft
Warm Season Turf *				
Hybrid bermudagrass Including Tifway 419, TifSport and Riviera	29.1 - 43.6	0.67 -1.0	7.25 -14.5	0.17 - 0.34
Cool Season Turf				·
Bentgrass: L-93, Penn A4, Penn G2, Pennlinks, Penneagle, Southshore	7.25 - 14.5	0.17 - 0.34	1.8 - 7.25	0.04 - 0.17
Kentucky bluegrass: Midnight, Odyssey	14.5 - 21.8	0.34 - 0.50		
Perennial ryegrass: Manhattan IV	21.8 - 29.1	0.5 - 0.67		

ANUEW APPLICATION RATES TABLE

*For color and quality enhancement, lower rates may apply

When using shorter application intervals, performance should first be evaluated using the lower recommended rates

FOR OVERSEEDING ENHANCMENT IN BERMUDAGRASS			
Turf Type	Ounces/ Acre	Application Interval	Notes
Hybrid bermudagrass (Including Tifway 419, TifSport, and Riviera)	0.90 -1.75	Apply ANUEW once 3-5 days prior to seeding. Any preparation of the site, such as verticutting, spiking, or scalping, should be done 1-2 days after application of ANUEW.	ANUEW is a foliar-active product; therefore germination and seedling growth of the overseeding are not affected when used as directed. Use good cultural practices in conjunction with this product, such as fertilization and irrigation, to optimize results. Some temporary yellowing of the bermudagrass turf may be observed, however, this will not affect the overseeding.

Poa annua REDUCTION IN BERMUDAGRASS OVERSEEDING			
Turf Type	Ounces/ Acre	Application Interval	
Hybrid bermudagrass (Including Tifway 419, TifSport, and Riviera)	0.90 - 1.75	Reapply at 3-4 week intervals during periods of active <i>Poa annua</i> growth	

FOR GROWTH MANAGEMENT AND COLOR AND QUALITY ENHANCEMENT ON TURF GROWN FOR SOD			
Turf Type	Ounces/ Acre	Application Interval	Notes
Warm Season Turf such as, but not limited to, bermudagrass	14.5 - 43.6	2-4 week interval	Since turfgrass response can be influenced by a variety of factors, it is recommended that the initial evaluation of ANUEW should be limited to a small area. The acceptability of the
Cool Season Turf such as, but not limited to, Kentucky bluegrass, perennial ryegrass, fescues	7.25 - 29.1	2-4 week interval	turfgrass response should be determined using a lower use rate and shorter interval before gradually moving to higher rates and longer intervals

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. **Pesticide Storage:** Store in a cool, dry place. Do not remove the product from the container except for immediate use.

Pesticide Disposal: Wastes resulting from this product may be disposed of at an approved waste disposal facility. Excess pesticide, spray mixture or rinsate must be handled and disposed of in accordance with federal, state or local procedures. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL CHEMTREC (800) 424-9300

NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILITY LIMITATIONS

<u>Important:</u> Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product. If terms are not acceptable return the unopened container for a full refund.

Our directions for use of this product are based on tests believed to be reliable. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, inadequate performance, or other unintended consequences may result due to soil or weather conditions, off target movement, presence of other materials, method of use or application, and other factors, all of which are beyond the control of Cleary Chemicals, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer and User.

Cleary Chemicals, LLC warrants that this product conforms to the specifications on the label when used in strict conformance with Direction for Use, subject to the above stated risk limitations. TO THE EXTENT CONSISENT WITH APPLICABLE LAW, CLEARY CHEMICALS, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

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