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STATE OF HAWAII
Department of Agriculture
ACCEPTED
LICENSE NO. 9805.82

Nufarm

T-Pac SPC MEC

Plant Growth Regulator

FOR TURF GROWTH MANAGEMENT

A microemulsion concentrate for managing growth, improving quality and stress tolerance, and edging of warm- and cool-season turfgrasses.

ACTIVE INGREDIENT:

Trinexapac-ethyl	11.3%
OTHER INGREDIENTS:	88.7%
TOTAL:	100.0%

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KEEP OUT OF REACH OF CHILDREN

CAUTION/PRECAUCIÓN

See Inside Label 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

EPA Reg. No. 228-635
EPA Est. No. 34704-MS-001

Net Contents
2.5 Gal.
(9.46 L)

Manufactured for
Nufarm Americas Inc.
150 Harvester Drive
Burr Ridge, IL 60527

Nufarm

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION/PRECAUCIÓN

Harmful if absorbed through skin, swallowed or inhaled. Causes moderate eye irritation. Avoid breathing vapor or spray mist. 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 C on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

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

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

Engineering Control Statements

When handlers use closed systems or enclosed cabs 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

Users 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.

FIRST AID	
IF ON SKIN OR CLOTHING	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
IF IN EYES	• Hold eye open and rinse slowly and gently with water for 15 to 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 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 INHALED	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOT LINE 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.	
NOTE TO PHYSICIAN	
If a large amount has been ingested, lavage stomach. An aqueous suspension of activated charcoal can be given to absorb remaining toxicant. Treat symptomatically.	

ENVIRONMENTAL HAZARDS

Do not apply directly to water, 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 washwater. Do not apply when weather conditions favor drift from treated areas.

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.

Observe all precautions and limitations on this label and on the labels of each product used in tank mixture with this product.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN UNEVEN GROWTH REDUCTION OR SEVERELY STUNTED TURF.

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.

The restricted-entry interval (REI) for this product is 0 days.

Do not enter treated areas without footwear until sprays have dried.

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.

GENERAL INFORMATION

This product is not registered for use in the commercial production of plants in the state of Arizona, such as sod farms.

This product is a microemulsion concentrate (MEC) for management of the growth of warm- and cold-season turfgrasses, reducing the frequency of mowing and the amount of grass clippings generated. Applications of this product also frequently result in increased turf density, increased color, and increased turf quality. Apply this product to turfgrass areas such as residential and commercial lawns, golf courses, sod farms, sports fields, cemeteries and other similar areas that are well-maintained. This product is useful in the management of difficult-to-mow areas and can be used to minimize the need for edging turfgrass along sidewalks, curbs, parking lots, driveways, flower beds, fences and around posts, storage sheds, and trees.

This product is absorbed by foliar uptake and is rainfast after one hour. Watering-in is not necessary for activation. Environmental conditions, management, and cultural practices that affect turf growth and vigor will influence the response of the turf to applications of this product. Fertility level, moisture availability, plant vigor, height and frequency of mowing, etc. have all been shown to influence the activity of this product. Full growth regulation by this product begins at about 3 to 5 days after application.

Notice To User: Plant tolerances to this product have been found to be acceptable for the grasses listed on this label; however, due to the large number of species and cultivars of grasses it is impossible to test every one for tolerance to this product. Neither the manufacturer nor the seller has determined whether or not this product can be used safely on grasses not specified on this label and professional users should first determine if it can be safely applied prior to commercial use by testing on a small scale by applying the lower specified rate for the turf setting (lawn, fairway, etc.) and evaluating for phytotoxicity and growth inhibition prior to widespread use.

USE PRECAUTIONS

- Do NOT apply this product through any type of irrigation system.
- Do NOT graze treated areas or feed treated clippings to livestock.
- Quality turf areas treated with this product should continue to receive regular maintenance practices, including irrigation; fertilization; and weed, disease, and insect control when necessary.
- Because some herbicides can injure turf, test tank mixes with this product on a small scale before widespread use.
- Temporary yellowing is sometimes a result of applications of this product but usually disappears approximately one week after application. To minimize yellowing and to enhance the green color of turf, apply readily available nitrogen at a rate of 0.2 to 0.5 lb. of actual nitrogen per 1,000 sq. ft. If desired, specified rates of iron per 1,000 sq. ft. can also be used.

APPLICATION INSTRUCTIONS

Excessive turf growth during spring flushes or as a result of fertilization require higher rates of this product (up to 50% greater) to provide an adequate length of control.

For extended growth suppression (up to 8 weeks) when temporary discoloration can be tolerated, apply a maximum of twice the specified product rate from the "Application Rate Table".

Reduce product use rates up to 50% for turfgrass grown under conditions of low fertility, compaction, or other factors, which stress the turf.

Multiple applications of this product can be made each growing season, but do not exceed a total of 7.0 fl. oz/1,000 sq. ft. (305 fl. oz./A; 19.0 pts./A) per year.

Mowing
This product generally provides greater suppression when turfgrasses are maintained at lower mowing heights and the application rates in this label have been selected for typical mowing heights; be sure to adjust the application rate based on the actual mowing conditions under which this product will be applied. To minimize possible turf injury, apply this product at least 4 hours before mowing or at least 1 hour after mowing.

Application Timing
Apply this product to actively-growing turf. Use a lower rate of this product if turf is going into dormancy because of high or low temperatures or lack of moisture.

As soon as the turf resumes growth or if more suppression is desired, make repeat applications of this product but do NOT apply more than 7.0 fl. oz./1,000 sq. ft. per year.

Equipment
Apply this product using backpack sprayers, hand sprayers, boom sprayers, and with spraygun application devices. Be sure to clean the spray equipment thoroughly before use and make sure the sprayer is calibrated and capable of accurate and uniform application. Rinse sprayer with clean water after use and dispose of rinsate in an approved manner.

MIXING AND APPLICATION INSTRUCTIONS

This product mixes completely with water (does not contain any petroleum solvents). Tank mix this product with commonly-used pesticides and liquid fertilizers. Prepare no more mixture than is necessary for the immediate operation in sufficient carrier (for example 0.5 to 4.0 gals. of water per 1,000 sq. ft.) to provide uniform and thorough coverage.

Once this product is uniformly mixed, no further agitation is required when the product is used alone, but agitation is needed for tank mixes. If using this product in a tank mixture, be sure to observe all directions for use, sites, use rate dilution ratios, precautions, and limitations, which appear on the tank-mix product's label(s). Do not exceed any label use rate and follow the most restrictive label precautions and limitations and do not mix this product with any product which prohibits such mixing.

Backpack and Hand Sprayers (0.5 to 4.0 gal. capacity)
Add all of the required water to the mix tank followed by the appropriate amount of this product. Close the sprayer and vigorously shake. Begin application.

Boom and Hand Gun Sprayers
This product Alone: Add all the required amount of water to the spray tank. Then, while agitating, add this product.

This product in Tank Mixtures: When mixing this product with other carrier and/or tank mix pesticide products, add the products to the spray tank using the following procedure:

1. Always check the compatibility of the tank mix using a jar test with proportionate amounts of this product, other products to be used, and the water before mixing in the spray tank. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls-up or forms flakes, sludges, gels, oily films or layers; or precipitates, it is not compatible and do not use the combination in a tank mix.
2. Fill tank at least 1/2 full of water.
3. Maintain sufficient agitation during filling to keep the tank mix uniformly suspended.
4. Add all products packaged in water-soluble bags first. Allow the packages to dissolve and the contents to completely disperse into the mix water. Then add water-dispersible granules (WG formulations) while maintaining agitation in the mix tank. Next, add wettable powders (WP formulations). Allow the products to disperse completely before other products are added.
5. Add emulsifiable concentrates (EC).
6. Add flowable liquids (FL) or suspension concentrates (SC).
7. Add this product.
8. Add spray adjuvants and spray markers. Use surfactants approved for application to turf. Check surfactant label before use.
9. Add the remainder of the water.
10. Do not leave tank mix combinations in the spray tank for prolonged periods without agitation. Mix and apply all of the spray solution on the same day.

Application Near and Around Monuments and Hardscape Materials
At normal dilution rates, this product will not stain brass, bronze, concrete, marble, granite, or other types of stone. Prior to using this product around other materials, test on a small-scale basis first.

Turf Pre-Stress Conditioning
Multiple product applications, in conjunction with cultural practices such as fertilization, irrigation, drainage and mowing height will delay the onset of stress, improve stress survival, and enhance turf's recovery from stress. Apply this product to healthy, actively growing turf before the onset of stress and continue to apply this product throughout the growing season as long as the turf remains healthy. **NOTE:** Do NOT apply more than 7.0 fl. oz./1,000 sq. ft. per year.

When turf top growth slows, energy is redirected to below-ground plant parts, and root and rhizome production increases resulting in root-mass that is often greater in product-treated turf than in similar, untreated turf.

Research indicates that this product enhances the performance of fungicides. Monthly applications of this product at the label rate or biweekly application at 1/2 the label rate strengthens the turfgrass to help it resist disease. Additionally, if mowing is less frequent, and leaf material removal is reduced, contact and systemic products will remain at effective concentrations on or in the turf longer.

Multiple product applications will result in smaller, more compact turfgrass and reduced leaf area, resulting in reduced transpiration, water use and improved drought tolerance. Increased turf density will also reduce moisture loss from soil evaporation, and additional soil moisture will be available due to increased root depth and mass. This product enhances cold and heat tolerance by increasing carbohydrate levels.

POA ANNUA CONVERSION/RENOVATION

As part of an overseeding/renovation program allowing better germination and seedling growth of more desirable turf, apply this product to existing turf infested with stands of *Poa annua*. By combining this product with appropriate cultural practices that help to ensure the vigor and growth of new seedlings, fewer clippings and reduced maintenance traffic on new seedlings will result. Additionally, seed germination is not affected because this product is absorbed foliarly. **NOTE:** Aggressive application rates result in temporary initial discoloration.

Apply this product 1 to 5 days before seeding and before verticutting, scalping, spiking or other similar operations. The following spring, apply the specified upper end rate of this product for the turf type and setting listed in the "Application Rate Table". Actual conversion success will also depend on growing conditions, fertilization, rainfall, and other agronomic and environmental conditions.

BERMUDAGRASS OVERSEEDING

Establishment of cool-season turfgrasses can be enhanced by applying this product to bermudagrass. By combining this product with appropriate cultural practices that help to ensure the vigor and growth of new seedlings, fewer clippings and reduced maintenance traffic on new seedlings will result. Additionally, seed germination is not affected because this product is absorbed foliarly. **NOTE:** Aggressive application rates result in temporary initial discoloration.

Apply this product to the bermudagrass 1 to 5 days before seeding or before verticutting, scalping, spiking, or other similar operations. For maintenance applications, see the "Application Rate Table". Use normal seeding rates for your area and turf setting (lawn, fairway, etc.). Actual overseeding results will also depend on growing conditions, fertilization, rainfall, and other agronomic and environmental conditions.

APPLICATION WITH TURF MARKING PAINT

When applied before or with marking agents, this product can extend the duration of marking visibility. When combining with latex-based marking agents, mix this product with water first and refer to the marking agent's products label for further instructions.

To treat approximately 1,000 sq. ft. of line surface area, apply this product at 1 oz./gal. of marking paint mix. Refer to the "Product Plus Tank Mixtures" section of this label for additional instructions.

Application Rates[1]
NOTE: The rates specified below should provide 50% suppression of turf growth with minimal yellowing for 4 weeks under good growing conditions.

Turf Type	Residential and Commercial turf[2]		Golf Course Fairways (cut at 1/2" or less)		Golf Course Greens		Edging/Banding[3]	
	fl. oz./ 1,000 sq. ft.	fl. oz./A	fl. oz./ 1,000 sq. ft.	fl. oz./A	fl. oz./ 1,000 sq. ft.	fl. oz./A	fl. oz./ 1,000 sq. ft.	fl. oz./A
Cool Season								
Bentgrass	0.75	33	0.25	11	0.125	6	1.0	44
Fescue, red	0.75	33					1.0	44
Fescue, tall (Ky-31)	1.0	44					1.0	44
Fescue, tall (Turf Types)	0.75	33					1.0	44
Kentucky Bluegrass	0.60	26	0.25	11			0.75	33
Mixture (Bentgrass/*Poa annua*)			0.25[4]	11	0.125	7		
Mixture (K. Bluegrass/Fescue/Ryegrass)	0.75	33						
Mixture (K. Bluegrass/Ryegrass/*Poa annua*)			0.50[5]	22				
Ryegrass, Annual	1.0	44					1.0	44
Ryegrass, Perennial	1.0	44	0.50	22			1.0	44
Warm Season								
Bahiagrass	1.0	44					1 to 2	44 to 88
Bermudagrass[5]								
Bermudagrass, Common	0.75	33	0.25	11			1 to 2	44 to 88
Bermudagrass, Other Hybrids	0.25	11	0.20	9			0.50 to 0.75	22 to 33
Bermudagrass, Tidwarf	0.20	9	0.20	9	0.062	3	0.50 to 0.75	22 to 33
Bermudagrass, Tifgreen (328)	0.25	11	0.20	9	0.125	6	0.75	33
Bermudagrass, Tifway (419)	0.38	16	0.25	11			0.75	33
Buffalograss	1.0	44					1.0	44
Carpetgrass	0.25 to 0.40	11 to 18					0.50	22
Centipedegrass	0.50	22					1.0	44
Kikuyugrass	0.30 to 0.50	13 to 22	0.3	13			1.0	44
St. Augustinegrass	0.10 to 0.15	4.50 to 6.50					0.40 to 0.80	18 to 36
St. Augustinegrass, Texas Common	0.10	4.5					0.20	9
Zoysiagrass	0.25	11	0.125	6			0.75	33

[1] Seedheads: At rates equal to or higher than the rates in Table 1, this product provides seedhead suppression of hybrid bermudagrass, and partial seedhead suppression of annual bluegrass, bahiagrass, buffalograss, carpetgrass, common bermudagrass, Kentucky bluegrass, and tall fescue. This product must be applied prior to seedhead formation. Do not apply more than 7.0 fl. oz./1,000 sq. ft. per year.
[2] Including, but not limited to: home lawns, parks, recreation areas, golf course roughs, cemeteries, business sites, sports fields, and sod farms.
[3] Apply this product along the perimeter of lawns, sidewalks, curbs, parking lots, driveways, posts, storage buildings, pet pens, fences, or other areas. Use this product around trees, shrubs, flower beds, and other border plants or similar areas with no injury. Apply this product in an 8- to 12-inch band with a single nozzle sprayer. Use the higher concentration to reduce the growth of turfgrass into adjacent areas.
[4] If yellowing of *Poa annua* is a concern, use half this rate and apply more frequently. For *Poa annua* conversion/renovation, apply where temporary discoloration can be tolerated, twice this rate.
[5] Bermudagrass overseeding preparation: 0.5 oz./1,000 sq. ft. for golf fairways and tees; 0.25 oz./1,000 sq. ft. for golf greens.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in a cool, dry place and avoid excess heat. Do not store below 0ºF. If crystals form, store above 70ºF, shaking periodically until crystals are dissolved.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL:
Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

WARRANTY DISCLAIMER

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