



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

July 31, 2024

Joseph Wolfe
Regulatory Manager, T&O
Nufarm Americas, Inc.
4020 Aerial Center Parkway, Suite 101
Morrisville, NC 27560

Subject: PRIA Label and CSF Amendment – Remove CRP Requirement, Revise Basic CSF and Remove Alternate CSF 1, Add Container Sizes <5 gallons, Change Signal Word from “DANGER” to “WARNING” and revise Precautionary Statements
Product Name: NUP-20017 All-in-One Herbicide
EPA Registration Number: 228-757
Application Date: September 7, 2023
Case Number: 490362

Dear Joseph Wolfe:

The amended label and Confidential Statements of Formula (CSF) referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, are acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. *This labeling must only be used with the revised basic formulation approved herein, unless subsequent changes have been approved.* You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

This amendment removes Condition 4 of this product’s Registration Notice dated August 2, 2023. Child-resistant packaging (CRP) is no longer required for this product based on its revised formulation. Therefore, the sale and distribution of this product in container sizes less than 5 gallons no longer requires CRP data.

Please note that the record for this product currently contains the following CSF:

- Basic CSF dated 7/10/2024

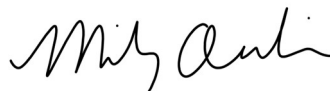
Any CSFs other than those listed above are superseded/no longer valid.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Derek Corbin at 202-566-2571 or at Corbin.Derek@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Mindy Ondish".

Mindy Ondish
Product Manager 23
Herbicide Branch
Registration Division (7505T)
Office of Pesticide Programs

Enclosure

2,4-D Quinclorac Triclopyr	GROUP	4	HERBICIDE
Sulfentrazone	GROUP	14	HERBICIDE

[NOTE TO REVIEWER: [text] in brackets denotes optional text]

NUP-20017 All-in-One Herbicide

FOR SELECTIVE CONTROL OF BROADLEAF AND GRASSY WEEDS AND SEDGES IN RESIDENTIAL AND NON-RESIDENTIAL TURFGRASS SITES, INCLUDING LAWNS OR GROUNDS AROUND RESIDENTIAL AND COMMERCIAL ESTABLISHMENTS, MULTI-FAMILY DWELLINGS, MILITARY AND OTHER INSTITUTIONS, PARKS, AIRPORTS, ROADSIDES, SCHOOLS, PICNIC GROUNDS, ATHLETIC FIELDS, HOUSES OF WORSHIP, CEMETERIES, GOLF COURSES AND SOD FARMS

[ABN: Allstar Herbicide]

ACTIVE INGREDIENTS:

	%W/W
Dimethylamine Salt of 2,4-Dichlorophenoxyacetic Acid*	12.81%
Dimethylamine Salt of Quinclorac (3,7-Dichloro-8-quinolinecarboxylic Acid)**	9.45%
Triethylamine salt of Triclopyr***	1.48%
Sulfentrazone****	0.64%
OTHER INGREDIENTS:	75.62%

TOTAL: 100.00%

By Isomer Specific AOAC Method, Equivalent to:

* 2,4-Dichlorophenoxyacetic Acid	10.64%, 1.00 lbs./gal.
** 3,7-Dichloro-8-quinolinecarboxylic Acid	7.97%, 0.75 lbs./gal.
*** Triclopyr	1.06%, 0.10 lbs./gal.
**** Sulfentrazone	0.64%, 0.06 lbs./gal.

KEEP OUT OF REACH OF CHILDREN WARNING / AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

SEE BELOW FOR FIRST AID AND PRECAUTIONARY STATEMENTS

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

FIRST AID

IF IN EYES	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 the poison control center or doctor Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> 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.

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 Nufarm at 1-877-325-1840 for emergency medical treatment information.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

ACCEPTED

07/31/2024

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 228-757

EPA REG. NO. 228-757
EPA EST. NO.

MANUFACTURED [BY] FOR
NUFARM AMERICAS INC.
11901 S. AUSTIN AVE.
ALSIP, IL 60803



NET [WEIGHT] [CONTENTS]
[Designation as "NONREFILLABLE" or "REFILLABLE" for containers > 5 gals]

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING / AVISO

Causes substantial but temporary eye injury. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes or on clothing. Avoid contact with skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

All mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eyewear
- Chemical-resistant gloves (Barrier Laminate, Butyl Rubber \geq 14 mils, Nitrile Rubber \geq 14 mils, Neoprene Rubber \geq 14 mils, Natural Rubber \geq 14 mils, Polyethylene, Polyvinyl Chloride \geq 14 mils, or Viton \geq 14 mils)
- Chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

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.

ENGINEERING CONTROLS:

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 170.607(d-e)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users Should:

- Wash hands thoroughly after handling 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. If pesticide gets on skin, wash immediately with soap and water.
- 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

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Drift and runoff may be hazardous to terrestrial and aquatic plants in neighboring areas. Keep out of lakes, ponds, and streams. Do not contaminate water when disposing of equipment wash waters or rinsate.

The chemicals in this product are known to leach through soil into groundwater under certain conditions as a result of label use. The use of these chemicals in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater. Do not use on coarse soils classified as sand which have less than 1% organic matter.

Sulfentrazone can contaminate surface water through spray drift. Under some conditions, sulfentrazone may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for many months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlying tile drainage systems that drain to surface waters.

Triclopyr may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having high potential for reaching surface water via runoff for several weeks after application. A level, well-maintained vegetative buffer strips between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of triclopyr from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

NON-TARGET ORGANISM ADVISORY: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

Proper handling instructions: This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sinkholes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pads or properly diked mixing/loading areas.

Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment. Product must be used in a manner that will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. READ ENTIRE LABEL BEFORE USING THIS PRODUCT. USE STRICTLY IN ACCORDANCE WITH LABEL PRECAUTIONARY STATEMENTS AND DIRECTIONS.

Do not apply this product in a way that will contact workers, other persons, or pets, either directly or through drift. Only protected handlers may be in the area during application. Keep people and pets out of the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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 48 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, shoes plus socks, protective eyewear, and chemical-resistant gloves (Barrier Laminate, Butyl Rubber \geq 14 mils, Nitrile Rubber \geq 14 mils, Neoprene Rubber \geq 14 mils, Natural Rubber \geq 14 mils, Polyethylene, Polyvinyl Chloride \geq 14 mils, or Viton \geq 14 mils).

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 allow people or pets to enter the treated area until sprays have dried.

MANDATORY SPRAY DRIFT MANAGEMENT

Ground Applications:

- For boom spraying, users must only apply with the release height recommended by the manufacturer, but no more than 30 inches above the ground or crop canopy.
- Applicators are required to select the nozzle and pressure that deliver a medium or coarser droplet size (ASABE S572).
- Do not apply when the wind speed is less than 3 mph or greater than 10 mph at the application site.
- Do not apply during temperature inversions.
- Ground applicators must use a minimum finished spray volume of 10 gallons per acre.
- When tank mixing this product with a contact burndown herbicide, use a minimum spray volume of 15 gallons per acre.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

Boom-less Ground Applications

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Handheld Technology Applications

Take precautions to minimize spray drift.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under environmental conditions.

Controlling Droplet Size – Ground Boom

Volume – Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.

Pressure – Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.

Spray Nozzle – Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Boom Height – Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

RESISTANCE MANAGEMENT

This product is a Group 4 and Group 14 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 4 and 14 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly on the same use site. Appropriate resistance-management strategies should be followed. To delay herbicide resistance take one or more of the following steps:

- Rotate this product or other Group 4 and 14 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use, and that considers mechanical control methods, cultural, biological and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method. Prevent movement of resistant weed seeds to other sites by cleaning equipment.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local sales representative, agricultural dealer, consultant, local extension specialist, applicator, crop advisor, and/or appropriate state agricultural extension service representative for additional pesticide resistance-management and/or integrated weed-management recommendations for specific use sites and weed biotypes.
- For further information or to report suspected resistance, contact Nufarm at 855-280-6609.

INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

PRODUCT INFORMATION

This product combines Sulfentrazone with 2,4-D, Quinclorac, and Triclopyr to provide broad-spectrum control of selected sedge, grass, and broadleaf weeds. This product is for use on residential and non-residential turfgrasses, including lawns or grounds around residential and commercial establishments, multi-family dwellings, military and other institutions, parks, airports, roadsides, schools, picnic grounds, athletic fields, houses of worship, cemeteries, golf courses and sod farms.

TURFGRASS TOLERANCE

Highly Tolerant Species	Moderately Tolerant Species	Susceptible (Do Not Use on these grass species)
Bluegrass, Annual (<i>Poa annua</i>) Bluegrass, Kentucky Fescue, Tall Ryegrass, Annual Ryegrass, Perennial	Bentgrass, Creeping ^{1,3} Bermudagrass, Common ¹ Bermudagrass, Hybrid ¹ Bluegrass, Rough (<i>Poa trivialis</i>) Fescue, Chewing's Fescue, Fine ² Fescue, Hard Fescue, Red Zoysiagrass	Bahiagrass Bentgrass, Colonial Bentgrass, Seaside Buffalograss Carpetgrass Centipedegrass Dichondra Paspalum, Seashore St. Augustinegrass

1. Yellowing that may occur on these species can be reduced by the addition of chelated iron or sprayable soluble nitrogen.
2. Only apply to fine fescue when it is part of a blend.
3. Applications to established creeping bentgrass must be applied in 2 applications at 1.1 to 1.8 ounces per 1,000 sq. ft.

The suitability use of this product on non-recommended turf species is determined by treating a small area at the lowest rate per acre for the turf type (warm or season turf). The treated area should be observed for any sign of turf injury for a period of 30 days of normal growing conditions to determine if the phytotoxicity and efficacy to the treated area is acceptable.

USE RESTRICTIONS

- Do not apply this product through any type of irrigation system.
- Do not apply this product aerially.
- Do not use on golf course greens, tees, or aprons.
- Do not use in or near greenhouses.
- Do not graze or feed treated grass to livestock.
- Do not harvest treated grass for hay.
- Do not pour spray solutions near desirable plants.
- Do not exceed specified dosages for any area; be particularly careful within the dripline of trees and other ornamental species.
- Do not add adjuvants, oils, wetting agents, fertilizers, surfactants or other pesticides to the spray solution unless your experience indicates that the tank mixture will not result in turf injury.
- Do not apply more than 8 pints of product (1.0 lb 2,4-D, 0.75 lb ae quinclorac, 0.10 lb ae triclopyr, and 0.06 lb sulfentrazone) per acre per application.
- Do not apply more than 2 broadcast applications to the same treatment site per year, excluding spot treatments. Do not apply more than 16 pints of product (2.0 lb 2,4-D, 1.50 lb ae quinclorac, 0.20 lb ae triclopyr, and 0.12 lb sulfentrazone) per acre per year.
- The minimum retreatment interval is 28 days.
- This product is persistent and may be present in treated plant materials for over 30 days after application.
- Do not remove grass clippings off-site for compost distribution or mulching until 30 days after application.
- Do not use clippings as mulch or compost around flowers, ornamentals, trees, or in vegetable gardens.

State Restrictions:

New York: Only one application per year of this product is allowed. This product is not allowed to be sold, distributed or used in Nassau or Suffolk Counties.

California: Make broadcast applications only between March 1 and September 1. If weeds appear during other times of the year, a spot application can be made. While sufficient amounts of water are necessary and important for plant growth, apply irrigation water efficiently so that no more than 125% of the net irrigation requirement is applied for any irrigation event. Apply efficient irrigation for six months following an application of a Sulfentrazone containing product. Do not apply product to bare ground.

Arizona: Do not use this product on sod farms.

USE PRECAUTIONS

Failure to observe all precautions may result in injury to turfgrass and/or susceptible plants. Avoid applications to newly seeded grasses until well established. Avoid drift of spray mist to vegetables, flowers, ornamental plants, shrubs, trees and other desirable plants. Avoid fine mists. Avoid contact with exposed feeder roots of ornamentals and trees. Use caution when applying to ensure no spray solution collects on the tires of application equipment. Use caution when daily high air temperature exceeds 90 degrees. Avoid applying during

excessively dry or hot periods unless irrigation is used. For optimum results, do not apply if rainfall is expected within 2 hours of the application. Clean and rinse spray equipment using soap or detergent and water, and rinse thoroughly before reuse for other sprays.

This product can be mixed with some liquid fertilizers or liquid iron materials. Because liquid fertilizer and liquid iron differ in pH, free ammonia content, density, salt concentration and percentage of water, a compatibility test is recommended prior to mixing in application equipment. All regulations, either State or Federal, relating to the application of liquid fertilizers or liquid iron and this product must be strictly followed.

APPLICATION TIMING

Apply this product to actively growing weeds as a postemergence broadcast or spot spray. A follow-up application after 4 weeks may be required for dense infestations of broadleaf and grassy weeds.

NEWLY SEEDED AREAS: The application of this product to grass seedlings is not recommended until after the third mowing or 4 weeks after seedling emergence of turf species listed on this label.

NEWLY SODDED, SPRIGGED, OR PLUGGED AREAS: The application of this product to newly sodded, sprigged, or plugged grasses should be delayed until 3 to 4 weeks after the sodding, sprigging, or plugging operations. Delay applications for 4 weeks after seeding and emergence of Kentucky Bluegrass, Perennial Ryegrass and Fine Fescues.

SEEDING: Turf species on this label can be seeded into the treated areas 7 days after application with the exception of Kentucky bluegrass. Kentucky bluegrass can be seeded 14 days after application unless slight growth regulation can be tolerated.

MOWING: It is recommended to delay mowing for two days before and two days after application. Do not remove grass clippings off-site until 30 days after application. Do not use clippings as mulch or compost around flowers, ornamentals, trees, or in vegetable gardens.

IRRIGATION AND RAINFALL: If soil moisture is not sufficient prior to application, irrigation may improve weed control. For best results, DO NOT water or irrigate for 12 hours after application. If rainfall does not occur in 2 to 7 days after application, irrigation of at least one-half inch is suggested.

MIXING INSTRUCTIONS

Begin with a clean spray tank. Fill the spray tank with one-half the required amount of clean water. Slowly add this product while agitating, then complete filling the tank with water. Maintain continuous agitation until spraying is complete. If left standing for extended periods of time, re-agitate to assure uniformity of the spray mixture.

Adding adjuvants may cause slight leaf burn, but turf vigor is not reduced. Delaying applications when relative humidity and temperatures are high may help to avoid potential for leaf burn and turfgrass damage. Low mowing heights may also increase the possibility of turf injury. The addition of chelated iron or sprayable solution nitrogen fertilizer will reduce slight yellowing.

For best results, the addition of methylated seed oil is recommended when it meets all of the following criteria:

- has been shown to be non-phytotoxic
- contains only EPA-exempt ingredients
- provides good mixing results in the jar test
- successful when used in local experience

Including additives when tank mixing with emulsifiable concentrate (EC) products may cause phytotoxicity. Adding oil, wetting agent, or other appropriate surfactant to the spray may be used to increase effectiveness on weeds but doing so may result in turf damage.

Clean and rinse spray equipment using soap or detergent and water, and rinse thoroughly before reuse for other sprays.

The following compatibility test should always be performed prior to full-scale tank mixing.

1. Pour 18 ounces of water into a quart jar.
2. Add 1 ounce of either the liquid fertilizer or liquid iron to be used.
3. Add 1 ounce of this product.
4. Close jar and shake well.
5. Watch the mixture for several seconds after shaking and check again after 30 minutes.
6. If the mixture does not show signs of separating, the combination may be used. If the mixture foams excessively, gels, separates or gets very thick, do not combine for field application.
7. Compatibility may be improved by adding a compatibility agent. Follow the previously outlined test procedures and add 1/6 ounce of the compatibility agent between steps (the compatibility agent must be added to the fertilizer or iron before adding this product).
8. If the mixture does not separate, gel, foam or get very thick, it may be used for field application. Mix only the amount to be sprayed. Do not allow to stand overnight.

SPRAYING INSTRUCTIONS

Spray Distribution: The accuracy and uniformity of the herbicide distribution is the sole responsibility of the applicator.

Spray Volumes: Apply in 10 to 240 gallons of water per acre (0.2 to 5.5 gallons of water per 1,000 square feet).

Spot Spray with Hand Sprayers: Calibration and proper, uniform applications are essential when using this product. Over application or rates above those specified including excessive overlaps of this product can cause injury. Calibrate sprayer to deliver 1 gallon of spray solution per 1,000 square feet of treated area. Adjust application rate accordingly if utilizing a higher or lower spray gallonage.

Lower Volume Equipment: Use as little as 10 gallons of water per acre. Use only application equipment that can spread droplets uniformly, wetting each weed surface.

WEEDS CONTROLLED

This product will control or suppress the following list of weeds. For best results, apply this product when weeds are actively growing and in early stages of growth. More mature weeds will be more difficult to control and may require a second application. Mature, drought-stressed weeds will be more difficult to control so adequate soil moisture is preferred. Adverse or extreme environmental conditions such as poor soil conditions, high temperatures, drought and cultural conditions may affect the performance of this product. Under certain conditions annual grasses at the 2 to 4-tiller stage may not be completely controlled and a sequential application may be needed.

Alder ³	Common sowthistle ³	Horsetail ³	Prostrate vervain ³	Tick trefoil ³
Annual yellow sweet clover ³	Corn chamomile ³	Indiana mallow ³	Puncture vine ³	Toadflax ³
Artichoke ³	Creeping Jenny ³	Ironweed ³	Purslane ³	Trailing crownvetch ³
Austrian fieldcress ³	Crabgrass, large ^{1,2,4}	Jewelweed ³	Ragweed ³	Tumble mustard ³
Barnyardgrass ²	Crabgrass, smooth ^{1,2,4}	Jimsonweed ³	Red clover ²	Tumble pigweed ³
Bedstraw ³	Crimson clover ³	Kochia ³	Redroot pigweed ³	Tumbleweed ³
Beggartick ³	Croton ³	Knawel ³	Red sorrel ³	Velvetleaf ³
Biden ³	Cudweed ³	Knotweed ³	Redstem filaree ³	Venice mallow ³
Bindweed ³	Curly dock ³	Lambsquarter ³	Rough cinquefoil ³	Veronica ³
Bird vetch ³	Curly indigo ³	Lespedeza ³	Rough fleabane ³	Vervain ³
			Roundleafed marigold ³	Vetch ³
Bitterweed ³	Dandelion ²	Locoweed ³	Rush ³	Violet, wild ²
Bitter wintercress ³	Dead nettle ³	Lupine ³	Russian pigweed ³	Virginia buttonweed ³
Black-eyed Susan ³	Dock ³	Mallow ³	Russian thistle ³	Virginia creeper ³
Black medic ²	Dollarweed ²	Marshelder ³	St. John's wort ³	Virginia pepperweed ³
Black mustard ³	Dogbane ³	Matchweed ³	Scarlet pimpernel ³	Wavyleaf bull thistle ³
Black-seed plantain ³	Dogfennel ³	Mexicanweed ³	Scotch thistle ³	Western clematis ³
Blessed thistle ³	Elderberry ³	Milk vetch ³		
		Milkweed	Sheep sorrel ³	Western salsify ³
Blue lettuce ³	English daisy ³	bloodflower ³	Shepherd's purse ³	White clover ²
Blue vervain ³	Fall dandelion ³	Mugwort ³	Signalgrass, broadleaf ²	White mustard ³
			Slender plantain ³	Wild aster ³
Boxelder ³	False dandelion ³	Morningglory ²	Smallflower galinsoga ³	Wild buckwheat ³
Bracted plantain ³	False flax ³	Mouseear chickweed ³	Smartweed ³	Wild carrot ³
			Smooth dock ³	Wild four-o'-clock ³
Brassbuttons ³	False sunflower ³	Musk thistle ³	Smooth pigweed ³	Wild garlic ³
Bristly oxtongue ³	Fiddleneck ³	Mustard ³	Sneezeweed ³	Wild geranium ³
Broadleaf dock ³	Field bindweed ²	Narrowleaf plantain ³	Southern wild rose ³	Wild lettuce ³
Broadleaf plantain ³	Field pansy ³	Narrowleaf vetch ³	Sowthistle ³	Wild marigold ³
Broomweed ³	Fleabane (daisy) ³	Nettle ³	Spanishneedle ³	Wild onion ³
Buckhorn ³	Flixweed ³	Yellow nutsedge ³	Spatterdock ³	Wild parsnip ³
Buckhorn plantain ³	Florida betony ³	Orange hawkweed ³	Speedwell ³	Wild radish ³
Bulbous buttercup ³	Florida pusley ³	Oxalis ³	Spiny amaranth ³	Wild rape ³
Bull nettle ³	Foxtail, Giant ^{1,2}	Oxeye daisy ³	Spiny cocklebur ³	Wild strawberry ³
Bull thistle ³	Foxtail, Green ^{1,2}	Parsley-piert ³	Spotted catsear ³	Wild sweet potato ³
Burdock ³	Foxtail, Yellow ^{1,2}	Parsnip ³	Spotted knapweed ³	Wild vetch ³
Burning nettle ³	Frenchweed ³	Pearlwort ³	Spotted spurge ³	Willow ³
Bur ragweed ³	Galinsoga ³	Pennycress ³	Spurge ³	Witchweed ³
Burweed ³	Garlic mustard ³	Pennywort ³	Spurweed ³	Woodsorrel ³
Buttercup ³	Goathead ³	Peppergrass ³		
Canada thistle ³	Goatsbeard ³	Pepperweed ³		
Carolina geranium ²	Goldenrod ³	Pigweed ³		
		Pineywoods bedstraw ³	Stinging nettle ³	Woolly croton ³
Carpetweed ³	Ground ivy ³	Plains coreopsis ³	Stinkweed ³	Woolly morningglory ³
Catchweed bedstraw ³	Gumweed ³	Plantain ³	Stitchwort ³	Woolly plantain ³
Catsear ³	Hairy bittercress ³	Poison hemlock ³	Strawberry clover ³	Wormseed ³
Catnip ³	Hairy fleabane ³	Poison ivy ³	Sumac ³	Yarrow ³
Chickweed ³	Hawkweed ³	Poison oak ³	Sunflower ³	Yellow rocket ³
Chicory ³	Healall ³			Yellowflower pepperweed ³
Cinquefoil ³	Heartleaf drymary ³	Pokeweed ³	Sweet clover ³	

Common chickweed ³	Hedge bindweed ³	Poorjoe ³	Tall nettle ³
Common mullein ³	Hedge mustard ³	Povertyweed ³	Thistle ³
	Hemp ³	Prostrate spurge ³	
	Henbit ³		
	Hoary cress ³		

¹ Under certain conditions, application of this product made to annual grasses at 2 to 4 tiller may not provide complete control. A sequential application will be required for grass control in these situations.

² Control in California requires an 8 pts/A application of this product (0.75 lbs ae/A Quinclorac).

³ NOT FOR USE to control this weed in California.

⁴ Biotypes of large and smooth crabgrass in California have shown varied response to this product. If control failure occurs following a full or split application, DO NOT reapply this product. Change to a herbicide with a different mode of action.

APPLICATION RATES FOR ORNAMENTAL TURF AND SOD FARMS

Apply 3 to 8 pts/A of this product to control weeds growing in Kentucky bluegrass, annual bluegrass, annual ryegrass, perennial ryegrass, tall fescue, chewing's fescue, hard fescue, red fescue, fine fescues, creeping bentgrass, hybrid Bermudagrass, common Bermudagrass, zoysiagrass or rough bluegrass. **See below table for details on application rates.**

TURFGRASS	USE RATE (fl. oz./1,000 sq.ft.)	USE RATE (Pints/Acre)	USE DIRECTIONS
Cool Season Turf Kentucky bluegrass Annual bluegrass Rough bluegrass Annual ryegrass Perennial ryegrass Chewing's fescue Tall fescue Hard fescue Red fescue Fine fescue	2.6 to 3.0	7 to 8 (0.87-1.0 lb 2,4-D, 0.66-0.75 lb ae quinclorac, 0.087- 0.10 lb ae triclopyr, and 0.05-0.06 lb sulfentrazone)	Use 40 GPA spray volume or higher for dense weed populations. Use reduced rates if grass is stressed from heat or drought.
Warm Season Turf Hybrid Bermudagrass Common Bermudagrass Zoysiagrass	1.8 to 2.6	5 to 7 (0.62-0.87 lb 2,4-D, 0.47-0.66 lb ae quinclorac, 0.062- 0.087 lb ae triclopyr, and 0.035-0.05 lb sulfentrazone)	Use reduced rates if grass is stressed from heat or drought. Some temporary discoloration may occur on warm season grasses.
Bentgrass Creeping bentgrass (Excluding Greens, Tees and Aprons)	1.1 to 1.8	3 to 5 (0.37-0.62 lb 2,4-D, 0.28-0.47 lb ae quinclorac, 0.037- 0.062 lb ae triclopyr, and 0.021-0.035 lb sulfentrazone)	Care should be taken to avoid overdosing creeping bentgrass or injury may result. Application to established creeping bentgrass must be applied in 2 applications. Apply when weeds are actively growing and temperatures are moderate to low with healthy, limited stress creeping bentgrass.

Note: Bronzing with spotting and speckling on the turfgrass foliage may occur following application. Treated turfgrass will recover with new growth. Discolored leaf tissue will be removed with mowing. To reduce potential for discoloration, avoid applications to highly actively growing turfgrass that is weakened by weather, mechanical, chemical, disease or other related stress.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container away from feed and food. Store at temperatures above 25°F. Protect product from freezing. If allowed to freeze, remix well before using. This does not alter this product. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use. Do not store near open containers of fertilizer, seed, or other pesticides.

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 HANDLING:

[Note to Reviewer: The following statement will be included on all Final Printed Labels bearing multiple Container Handling statements] **“NOTE:** This product is available in multiple containers. Refer to the Net Contents section of this products labeling for the applicable “No refillable” or “Refillable” designation. Follow the container handling instructions below that apply to your container type / size.”

[Note to Reviewer: The bracketed section headers will be included when multiple container types / sizes are listed on the label.]

[Non-refillable Containers 5 Gallons or Less:] Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. 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 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.

[Non-refillable Containers Larger than 5 Gallons:] Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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 a 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 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 Containers Larger than 5 Gallons:] Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

[Refillable Container:] Refill this container with pesticide only. Do not reuse this container for any other purpose. Close all openings and replace all caps. Contact Nufarm's Customer Service Department at 1-800-345-3330 to arrange for return of the empty refillable container.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

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If you do not agree with or do not accept any of the directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV[mmddyy])

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[Optional Marketing Claims:]

[Nufarm Grow a better tomorrow.]

[Grow a better tomorrow.]

LABEL HISTORY

File Name	Revision Mark	Comment
000228.xxx.20211213		
000228-00TLT.20221114		Change to Cat. 1 DANGER signal word due to PEI study results
000228-00TLT.20230622		EPA Edits
000228-00757.20230908		Label amendment to reduce to WARNING signal word with secondary PEI study