



Turf Herbicide for Grassy & Broadleaf Weeds

*For use in New York State by spot treatment only.
Not for sale, distribution, or use in Nassau or
Suffolk Counties in New York State.*

ACTIVE INGREDIENTS:

Quinclorac	8.43%
Sulfentrazone	0.69%
2,4-D, dimethylamine salt	11.81%
Dicamba, dimethylamine salt	1.49%

OTHER INGREDIENTS:	77.58%
TOTAL	100.00%

THIS PRODUCT CONTAINS:

0.75 lb. 3,7-dichloro-8-quinolinecarboxylic acid per gallon or 8.43%.
 0.06 lb. N-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]phenyl]methanesulfonamide per gallon or 0.69%.
 0.88 lb. 2,4-dichlorophenoxyacetic acid equivalent per gallon or 9.81%.
 0.10 lb. 3,6-dichloro-o-anisic acid equivalent per gallon or 1.24%.
 Isomer Specific By AOAC Methods.
 CAS Registry Numbers: Quinclorac (84087-01-4), Sulfentrazone (122836-35-5),
 Dicamba, dimethylamine salt (2300-66-5), 2,4-D, dimethylamine salt (2008-39-1).
 U.S. Patent 6,849,579

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 some one to explain it to you in detail.)



**READ THE ENTIRE LABEL FIRST.
OBSERVE ALL PRECAUTIONS AND
FOLLOW DIRECTIONS CAREFULLY.**

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Harmful if swallowed.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are natural rubber, natural rubber blends and laminates. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

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

- long-sleeved shirt and long pants,
- protective eyewear (such as goggles, face shield, or safety glasses),
- shoes and socks,
- chemical-resistant gloves (except for applicators using ground boom equipment) and
- chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

*Applicators may choose not to wear protective eyewear when dilution is with water only and dilution rates are greater (higher) than 5:1 or greater (higher) than 5 parts of water to 1 part of product.

User Safety Requirements

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.

User Safety Recommendations

- Users should wash hands thoroughly with soap and water before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should 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.
- Users should 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.

First Aid

If in eyes:	<ul style="list-style-type: none"> • 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 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 a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin or on clothing:	<ul style="list-style-type: none"> • 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.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-877-800-5556 for emergency medical treatment information.

Environmental Hazards

This pesticide may be 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. Do not contaminate water when disposing of equipment wash waters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical 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.

Physical and Chemical Hazards

Combustible. Do not use or store near heat or open flame.

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.

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 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.

(cont. on next page)

agitation, and complete filling the tank with water. Mix thoroughly and continue agitation while spraying.

When this product is left standing for extended periods of time, re-agitate to assure uniformity of the spray mixture.

Mixing with Liquid fertilizers:

In certain applications, liquid fertilizer may replace part of the water as a diluent.

ALWAYS PREMIX Q4 PLUS TURF HERBICIDE FOR GRASSY & BROADLEAF WEEDS WITH WATER BEFORE ADDING TO FLUID FERTILIZERS. For liquid nitrogen solutions such as UAN or urea solutions, use a premix of 1 part of this product with 4 parts of water or use a premix with a 1:4 ratio of product to water. For other fluid fertilizers such as suspensions, use a premix of 1 part of this product with 50 to 60 parts of water.

Use suitable sources and rates of fertilizer based upon local recommendations. Refer to the mixing directions on the labels of the liquid fertilizers. Always perform a jar test for compatibility before large scale mixing.

The jar test can be conducted by mixing all components in a small container in proportionate quantities. If the mixture separates after standing and can be mixed readily by shaking, then the mixture can be used and applied with spray equipment providing continuous agitation. If large flakes, sludge, gels or other precipitates form, or if a separate oily layer or oil globules appear, then the herbicide and the liquid fertilizer should not be prepared as a tank mixture.

5. Spray Equipment

Ground equipment: Power sprayers fitted with a boom or spray wand/gun may be used for broadcast applications and spot treatments. Boom sprayers equipped with appropriate flat fan nozzles, tips, and screens are suitable for broadcast applications. For best spray distribution and coverage, select a spray volume and delivery system that will ensure accurate and uniform coverage.

Hand-operated sprayers including backpack sprayers and compression sprayers are appropriate for small turfgrass areas. Calibration and proper application are essential when using this product.

Cleaning spray equipment: Clean sprayer before and after using this product. Use soap, household ammonia, detergent and water, or an approved spray tank cleaner and rinse thoroughly. Cross-contamination may cause physical incompatibility (mixing problems) or result in turf injury.

Spray distribution:

- The accuracy and uniformity of the herbicide distribution is the sole responsibility of the applicator.
- Uniform applications are essential when using this product. Over-application, excessive overlaps, or rates above those specified on this label can cause turf injury.
- Avoid spray overlaps with hand-held equipment: Wands fitted with flat fan nozzle tips may be used with the appropriate technique. Spray wands fitted with flat fan nozzles should not be waved in a back-and-forth motion, or in a side-to-side motion, or in a swinging arm motion. Instead, the nozzle should be held stationary at the proper height. Side-to-side motion results in uneven coverage. To avoid excessive spray pattern overlaps, a spray colorant may be used.
- This product may cause injury to susceptible/non-target plants at the use site by contacting the foliage, stems, or roots. To prevent injury to susceptible crops and other desirable broadleaf plants including but not limited to cotton, legumes, tobacco, tomatoes, garden/vegetable crops, and ornamentals (flowers, trees, and shrubs) avoid contact with the spray solution, spray droplets, and spray mist (fine droplets).

Chemigation: Do not apply this product through any type of irrigation system.

Aerial application: Do not apply as an aerial application.

6. Spray Drift Management

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of ground application can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Droplet Size

When applying sprays that contain 2,4-D as the sole active ingredient, or when applying sprays that contain 2,4-D mixed with active ingredients

that require a Coarse or coarser spray, apply only as a Coarse or coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray, apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sun-flowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

Equipment

All ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates. Additional requirements for ground boom application: Do not apply with a nozzle height greater than 4 feet above the turf canopy.

7. Post Emergent Control of Grassy Weeds

Q4 Plus Turf Herbicide for Grassy & Broadleaf Weeds can provide post emergent control and suppression of the grassy weeds listed in Table 1. Apply to weeds during the growth stages as shown in Table 1. Applications under adequate soil moisture conditions are preferred. Early summer treatments are generally more effective. Applications in the summer (approximately July 15 to August 15) to older, drought stressed grassy weeds are less effective. Late summer applications (after August 15) to mature crabgrass can be very effective. Weed control is affected by the spray volume, timing and the weed growth stages (see Tables 1, 2, and 3).

Weed species	1 to 3 leaf	4 to 5 leaf (1 tiller)	6 leaf (2 tillers)	7 leaf (3 tillers)	8 leaf (4 tillers)	Mature (late season)
Crabgrass, (large and smooth), Barnyardgrass, Foxtail, (green, yellow and giant), Signalgrass, (broadleaf)	X	X	X	Footnote 1	Footnote 1 (reduced control)	X
Nutsedge, (yellow)	X	Footnote 1	Footnote 1	Footnote 1	Footnote 1 (reduced control)	X

¹Second or follow-up applications on ornamental turfgrass may be required. Early summer treatments are generally more effective. Applications in the summer (approximately July 15 to August 15) to older, drought stressed grassy weeds are less effective. Late summer applications (after August 15) to mature crabgrass can be very effective.

8. Post Emergent Control of Broadleaf Weeds

Apply this product to broadleaf weeds that are young and actively growing for the best results. Spring and fall treatments under adequate soil moisture conditions are preferred to the summer treatments. Generally, summer broadcast applications to older, drought stressed weeds are less effective. Fall applications provide improved control for emerged winter annuals and perennials such as henbit, chickweed, clover and ground ivy.

9. Applications

The maximum number of broadcast applications is limited to 2 per year. Spot treatments during the spring and summer are suitable for sparse infestations or as a follow-up treatment to a broadcast application on an “as-needed” basis. Second or follow-up applications as either broadcast or spot treatments should be made after the initial application on ornamental turfgrass and are recommended for more mature weeds, for dense infestations and for adverse environmental conditions.

Other situations that may need two broadcast or follow-up treatments include the following:

- Under certain conditions, applications of this product at the 3 to 4 tiller stage of the annual grasses may not provide complete control.
- All weed grasses do not germinate at the same time. The period of germination for crabgrass and annual grasses can extend into the summer after the initial application of this product and results may be poor and erratic.
- Dense infestations of weeds may prevent thorough spray coverage of the target weeds.
- Biotypes of large and smooth crabgrass in California have shown varied response to quinclorac. If control failure occurs following a second application, do not reapply this product. Change to a herbicide with a different mode of action.

Extremes in environmental conditions, ie. temperature and moisture, soil conditions, and cultural practices may affect the activity of this product. Under warm moist conditions, herbicide symptoms may be accelerated. Under dry conditions, the expression of herbicide symptoms is generally delayed, and weeds hardened off by drought may be less susceptible to this product.

If objectionable turf injury occurs with the first application, then avoid making the second application of this product until the turfgrass recovery is complete.

Do not broadcast apply this product when temperatures are above 90°F temporary turfgrass discoloration can also be expected with spot treatments when air temperatures exceed 90°F.

State Restrictions:

Arizona: Do not use this product on sod farms in Arizona.

California: Make broadcast applications only between March 1 and September 1. If troublesome weeds appear during other times of the year, a spot application can be made. While irrigation is 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 irrigations for six months following application of sulfentrazone containing products. Do not apply product to bare ground.

New York: For use in New York State by spot treatment only. Spray individual weeds only. Adjust the sprayer to coarse spray to minimize wind drift. Apply to center of the weed and spray lightly to cover. Not for sale, distribution, or use in Nassau or Suffolk Counties in New York State.

TABLE 2. BROADCAST TREATMENTS FOR COOL-SEASON TURFGRASS	
Application Site	Use Rate per Application
Kentucky Bluegrass, Perennial ryegrass, Fescues, Annual Bluegrass (<i>Poa annua</i>), Rough Bluegrass (<i>Poa trivialis</i>), Annual Ryegrass	7 to 8 pints/A (2.6 to 3.0 fl. oz./1000 sq. ft.)
<p>Spray Volume For Conventional Spray Equipment: Use 50 to 220 gal./A (1.2 to 5.0 gal./1000 sq. ft.).</p> <p>For Low Volume Spray Equipment (such as PermaGreen Equipment and backpack sprayers): Equipment should be calibrated to apply at least 20 gallons per acre (0.45 gallons/1,000 sq. ft.). Use this lower spray volume (0.45 gallons/1,000 sq. ft.) only when your experience indicates that this volume provides effective weed coverage, adequate weed control, acceptable turf safety/tolerance, and will not result in objectionable turf injury.</p> <p>Note: Use the higher spray volumes (more than 50 gpa) for dense weed populations.</p>	

TABLE 3. BROADCAST TREATMENTS FOR BERMUDAGRASS AND ZOYSIAGRASS	
Application Site	Use Rate per Application
Bermudagrass (common and hybrid) Zoysiagrass	5 to 7 pints/A (1.8 to 2.6 fl. oz./1000 sq. ft.)
<p>Spray Volume For Conventional Spray Equipment: Use 50 to 220 gal./A (1.2 to 5.0 gal./1000 sq. ft.).</p> <p>For Low Volume Spray Equipment (such as PermaGreen Equipment and backpack sprayers): Equipment should be calibrated to apply at least 20 gallons per acre (0.45 gallons/1,000 sq. ft.). Use this lower spray volume (0.45 gallons/1,000 sq. ft.) only when your experience indicates that this volume provides effective weed coverage, adequate weed control, acceptable turf safety/tolerance, and will not result in objectionable turf injury.</p> <ul style="list-style-type: none"> • Apply only when Bermudagrass and zoysiagrass are actively growing. • Expect temporary discoloration. • Some Bermudagrass hybrids and zoysiagrass cultivars are moderately tolerant to this product and may be more susceptible to discoloration. • For Bermudagrass hybrids, use lower rates until tolerance to injury can be determined. • It is impossible to test all environmental conditions and all Bermudagrass hybrids or zoysiagrass cultivars. We suggest testing this product on a small area and observe the treated area for 30 days (during normal growing conditions) to determine the acceptability of turf discoloration. • Some stunting of the Bermudagrass or zoysiagrass should be expected and turf generally recovers in 7 to 21 days. • Do not apply in the fall during fall-to-winter transition period. • Do not apply in the spring during winter-to-spring transition period. • To avoid turf injury, use only on Bermudagrass or zoysiagrass that is not under stress from diseases, insects, excess heat or cold, drought or excess rainfall/irrigation, shaded areas, low soil pH, nematodes, improper mowing or improper applications of fertilizer and pesticides. • For optimum results: <ul style="list-style-type: none"> • Irrigate 24 hours before and 24 hours after application with 1/2 inch of water. • The addition of nitrogen fertilizer or chelated iron (such as FeRROMECS® Plus MICROS) may reduce some turf discoloration. • Spray in the morning hours and avoid application during extreme hot or dry conditions. • Equipment calibration is essential and avoid spray overlaps. • Do not use higher pressure equipment, spray pressure should be 40 psi or lower. 	

SPOT TREATMENTS:

- Calibration and proper application are essential when using this product. Spray coverage should be uniform and complete.
- Over applications can result in turfgrass injury.
- **Cool-Season Turf listed in Table 2:** Mix 2.6 to 3.0 fl. oz. of this product with 1.0 gallons of water for treatment of approximately 1,000 sq. ft. of turfgrass. Apply to weeds during the growth stages as shown in Table 1.
- **Warm-Season:** See specific Bermudagrass and zoysiagrass directions in Table 3. Mix 1.84 to 2.57 fl. oz. of this product with 1.0 gallons of water for treatment of approximately 1,000 sq. ft. of turfgrass. Apply to weeds during the growth stages as shown in Table 1.

Limitations for use on Ornamental Turf and Non-Cropland areas:

The maximum number of broadcast applications is limited to 2 per year with a minimum of 30 days between applications. The maximum application rate is 8 pints of product per acre per application. The maximum seasonal rate is 16 pints of product per acre per year.

Limitation for use on Sod Farms:

The maximum number of broadcast applications is limited to 2 per year with a minimum of 21 days between applications. The maximum application rate is 8 pints of product per acre per application. The maximum seasonal rate is 16 pints of product per acre per year.

10. Weeds Controlled

Q4 Plus Turf Herbicide for Grassy & Broadleaf Weeds will control or suppress the following. Apply when weeds are young and actively growing.

WEEDS

Aster, white heath & white prairie	Chicory
Barnyardgrass	Cinquefoil
Bedstraw	Clovers
Beggarweed, creeping	Crabgrass ^{1,2} (large and smooth)
Bindweed	Curly dock
Black medic	Dandelion
Broadleaf plantain	Dayflower
Buckhorn plantain	Deadnettle
Bull thistle	Dock
Burdock, common	Dogfennel
Buttercup, creeping	Dollarweed (*pennywort)
Carpetweed	English Daisy ¹
Chickweed, common	

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