

QUALI-PRO

DITHIOPYR GROUP 3 HERBICIDE



DITHIOPYR 2EW

SPECIALTY HERBICIDE

Provides control of listed annual grasses and broadleaf weeds in:

- Established lawns
- Commercial sod farms
- Ornamental and sports turf (including but not limited to sport fields, golf course fairways, roughs, tee boxes, unimproved turfgrass areas)
- Container grown ornamentals
- Field-grown ornamentals
- Landscape ornamentals
- Non-cropland such as: airports, barrow ditches, cemeteries, communication transmission lines, electrical power and utility rights-of-way, fencerows, gravel pits, hard-surface cracks, industrial sites, military lands, mining and drilling areas, non-irrigation ditch banks, gas and oil pads, parking lots, petroleum tank yards, pipelines, pump stations, railroads, roadsides, debris retention areas, service roads, solar fields, storage areas or yards, substations, vacant lots and other non-crop residential and commercial areas
- Natural areas (open space) such as: restoration sites, campgrounds, parks, prairie management, trails and trailheads, recreation areas, wildlife openings and wildlife habitat and management areas
- Christmas tree farms

In New York State, this product may be used by commercial applicators only, at no more than 2 pints (0.5 lb active ingredient) per acre per year. In Nassau and Suffolk counties of New York, do not exceed 1 pint per acre per year of this product (equivalent to 0.25 lb of active ingredient per acre).

ACTIVE INGREDIENT:	% BY WT.
dithiopyr: S,S'-dimethyl 2-(difluoromethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-	24.0%
OTHER INGREDIENTS:	76.0%
TOTAL:	100.0%

Contains petroleum distillates

Contains 240 grams per liter or 2 lb active ingredient per U.S. gallon.

EPA Reg. No.: 53883-500
EPA Est. No: 37429-GA-001

NET CONTENTS: 1 GALLON



Manufactured by:
Control Solutions Inc.
5903 Genoa-Red Bluff, Pasadena, TX 77507
A member of Adama
Consumer and Professional Solutions
EPA 073021

**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.)

FIRST AID	
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.
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.
<p>Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact SafetyCall® International for emergency medical treatment at (866) 897-8050.</p>	
<p>Note to Physician: Contains petroleum distillate. Vomiting may cause aspiration pneumonia.</p>	

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

WARNING:

- Causes skin irritation
- Causes moderate eye irritation
- Prolonged or frequently repeated skincontact may cause allergic reaction in some individuals
- Do not get on skin or on clothing
- Avoid contact with eyes
- 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)

WPS Uses: Applicators and other handlers who handle this product for any use covered by the Worker Protection Standard (40 CFR Part 170) – in general, agricultural plant uses are covered -must wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves >14 mils such as barrier laminate or butyl rubber
- Chemical-resistant footwear plus socks

WPS Uses: Mixers and loaders must wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves >14 mils such as barrier laminate or butyl rubber
- Chemical-resistant footwear plus socks
- Chemical-resistant apron

Non-WPS Uses: Applicators and other handlers, mixers and loaders who handle this product for any use NOT covered by the Worker Protection Standard (40 CFR Part 170) – in general, agricultural plant uses are covered - must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves >14 mils such as barrier laminate or butyl rubber

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them. Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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 thoroughly with soap and water after handling and 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
- Remove PPE immediately if pesticide gets inside. Wash out outside of gloves before removing as soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and highly toxic to other aquatic organisms including oysters and shrimp. Use with care when applying to turf areas adjacent to any body of water. Drift and runoff from treated turf may be hazardous to aquatic organisms in water adjacent to treated areas. 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 apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

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. For further guidance and instructions on how to minimize spray drift, refer to the Spray Drift Management section of this label.

Groundwater Advisory:

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory:

This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground. This product is classified as having a high potential for reaching surface water via runoff for several weeks after application.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying. 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 the label about personal protective equipment, restricted-entry interval, and notification to workers (as applicable). 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.

For early entry into 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, wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves >14 mils such as barrier laminate or butyl rubber
- Chemical-resistant footwear 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.

- Keep unprotected persons out of treated area until sprays have dried.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store this product only in its original container in a dry, cool, secured storage area. Store this product above 32°F to avoid crystallization. If crystals form or product freezes, move product to area with ambient temperature above 32°F and shake well until crystals have dissolved.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Nonrefillable containers 5 gallons or less:

Container Handling: Nonrefillable container. Do not reuse or refill this container. 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.

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 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. **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 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.

PRODUCT INFORMATION

Dithiopyr 2EW specialty herbicide provides control of crabgrass and other annual grasses and broadleaf weeds in established lawns, commercial sod farms, ornamental and sports turf (including but not limited to sport fields, golf course fairways, roughs, tee boxes, unimproved turfgrass areas), container grown ornamentals, field-grown ornamentals, landscape ornamentals, non-cropland (see list above), natural areas and Christmas trees.

This product will not control established weeds, except for crabgrass in early stages of growth. For optimum control, applications of this product should be made preemergence (prior to germination of target weeds).

This product is most effective when activated by 1/2 inch or more of rainfall or irrigation. To optimize control, ensure that activation has occurred prior to germination of most grass and broadleaf weeds. Do not apply this product through any type of irrigation system. Do not apply by air.

Weed Resistance Management

Dithiopyr, the active ingredient in this product, is a Group 3 herbicide based on the mode of action classification system of the Weed Science Society of America. Any weed population may contain or develop plants resistant to Group 3 herbicides. Resistant weeds may dominate the weed population if these herbicides are used repeatedly in the same field. Such resistant weed plants may not be effectively managed using Group 3 herbicides but may be effectively managed utilizing other herbicides alone or in mixtures from a different herbicide Groups that are labeled for control of these weeds and/or by using cultural or mechanical practices. However, a herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides. Consult your local company representative, state cooperative extension service, professional consultants or other qualified authorities to determine appropriate actions for treating specific resistant weeds.

To delay herbicide resistance take one or more of the following steps:

- Rotate the use of this product or other Group 3 herbicides within a growing season sequence or amonggrowing seasons with different herbicide groups that control the same weeds in a field.
- 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 lessprone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer applicationmethod and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) 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. Ifresistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- 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 extension specialist or certified crop advisors for additional pesticide resistance- management and/ or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact your local sales rep.

Best Management Practices

Proactively implementing diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides is recommended. A diversified weed management program may include the use of multiple herbicides with different modes of action and overlapping weed spectrum with or without tillage operations and/or other cultural practices. Research has demonstrated that using the labeled rate and directions for use is important to delay the selection for resistant weeds. Scouting after a herbicide application is important because it can facilitate the early identification of weed shifts and/or weed resistance and thus provide direction on future weed management practices. One of the best ways to contain resistant weed populations is to implement measures to avoid allowing weeds to reproduce by seed or to proliferate vegetatively. Cleaning equipment between sites and avoiding movement of plant material between sites will greatly aid in reducing the spread of resistant weed seed.

MANDATORY SPRAY DRIFT MANAGEMENT

Ground Boom Applications:

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet 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 wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

Boomless Ground Applications:

- Applicators are required to select the nozzle and pressure that deliver a medium or coarser droplet size(ASABE S572).
- Do not apply when wind speeds exceed 15 miles per hour at the application site. • Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

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 unfavorable environmental conditions.

- 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: 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.

Boomless 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.

Mixing Directions

Dithiopyr 2EW Alone with Water as the Carrier

Fill a previously cleaned spray tank with water to about three-fourths of the desired volume. Add the specified amount of Dithiopyr 2EW to the tank. Complete the filling process while maintaining agitation.

Remove the hose from the mixing tank immediately after filling to avoid siphoning back into the water source.

Dithiopyr 2EW Alone with Liquid Fertilizer as the Carrier

Determine the compatibility of Dithiopyr 2EW with the desired liquid fertilizer by mixing small proportional quantities in advance. See the Physical Compatibility Test section of this label. Then follow the mixing procedure listed below for tank mixtures.

Tank Mixtures

Dithiopyr 2EW may be applied in tank mix combination with labeled rates of liquid fertilizers or other herbicides, such as but not limited to Isoxaben, Florasulam and Glyphosate, provided (1) the tank mix product is labeled for the timing and method of application for the use site to be treated; and (2) tank mixing is not prohibited by the label of the tank mix product. Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels. When tank mixing, use the most restrictive label limitations for each of the products being used in the tank mix.

When tank mixing **Dithiopyr 2EW** with other materials, a compatibility test (jar test) using relative proportions of the tank mix ingredients should be conducted prior to mixing ingredients in the spray tank. See the Physical Compatibility Test Mixing Instructions section of this label.

Mixing Order for Tank Mixes: Place a 20 to 35 mesh screen or wetting basket over the filling port. Fill the spray tank 1/2 full with the appropriate carrier. Start agitation. Slowly add different formulation types in the order indicated below, allowing time for complete dispersion and mixing after addition of each product.

1. Compatibility agent (if needed)
2. Wettable powder or water dispersible granules (if used)
3. Suspension concentrates
4. **Dithiopyr 2EW** and liquid (emulsifiable concentrate or liquid concentrate) pesticide (if used)
5. Water soluble liquid products
6. Surfactants, marker dyes or drift control additives

Maintain an air buffer between the hose and the solution in the tank to avoid siphoning back into the carrier source. Maintain continuous agitation during mixing and throughout application. If spraying and agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be resuspended before spraying is resumed.

Premixing: Dry and flowable formulations should be premixed with water in a slurry and added to the spray tank through a 20 to 35 mesh screen. This procedure assures good initial dispersion of these formulation types.

Physical Compatibility Test

Before mixing this product with liquid fertilizers and/or other pesticides, test compatibility by mixing all the components in a small jar in proportionate quantities:

Compatibility Test Mixing Instructions

Pesticide Formulation	If	Amount of Pesticide added to Spray Carrier (assuming volume is 25 gpa) Add:
	Rate per Acre is:	Level Teaspoons per Pint Jar of Carrier Solution
Dry	1 lb	1 1/2
Liquid	1 qt	1

This compatibility test is designed for 25 gallons of spray solution per acre (gpa). The table above gives general guidelines for use rate ratios of pesticides to be tank mixed with this product. Determine the amount of pesticide to tank mix by referring to the pesticide label(s). Then, calculate the amount of pesticide to add to the jar based on use rate ratios in table. For a use rate of 1 lb per acre of dry pesticide, add 1 1/2 teaspoons to the jar. For a use rate of 1 quart per acre of liquid pesticide, add 1 teaspoon to the jar. **Dithiopyr 2EW** should be added based on use rate ratios for liquid pesticides (for a use rate of 1 quart per acre, add 1 teaspoon to the jar). For changes in spray volume or herbicide rate, make appropriate changes in the ingredients for the test. Shake well after mixing.

If pesticide mix does not form crystals, flakes, sludge, gels, oily films or layers, then the components are compatible. Incompatibility in any of the above-described forms will usually occur within 5 minutes after mixing. If components are incompatible, a compatibility agent should be used. Repeat the above compatibility test with a suitable compatibility agent (1/2 teaspoon per pint jar is equivalent to 2 pints per 100 gallons of spray solution). Do not use mixtures that show incompatible signs such as formation of crystals, flakes, sludge, gels, oil films or layers.

Grass and Broadleaf Weeds Controlled by Dithiopyr 2EW

Used as directed, **Dithiopyr 2EW** controls annual grass and broadleaf weeds listed in the table below if applied preemergence. This product will not control emerged broadleaf weeds or grasses (except for crabgrass in early stages of growth).

Common Name

barley
 barnyardgrass
 bluegrass, annual
 brome
 crabgrass, large
 crabgrass, smooth
 crabgrass, southern
 crowfootgrass
 dallisgrass (seedling)
 foxtail, giant
 foxtail, green
 foxtail, yellow
 goosegrass
 kikuyugrass
 Mary's grass (Japanese stiltgrass)
 oats, wild
 ryegrass (annual & perennial)
 sandbur
 smutgrass
 southwestern cupgrass

Broadleaf Weeds

bittercress
 carpetweed
 chickweed
 dandelion, common
 geranium, Carolina
 henbit
 knotweed, prostrate
 lespedeza, common
 marestalk
 medic, black
 mulberry weed
 mustard
 oxalis, buttercup
 parsley-piert
 pigweed, redroot
 pineappleweed
 purslane, common
 rocket, London
 shepherdspurse
 sowthistle
 speedwell, corn
 spurge, garden
 spurge, prostrate
 spurge, spotted
 willowherb
 woodsorrel, creeping
 woodsorrel, yellow

Scientific NameGrasses

Hordeum spp.
Echinochloa crus-galli
Poa annua
Bromus spp.
Digitaria sanguinalis
Digitaria ischaemum
Digitaria ciliaris
Dactyloctenium aegyptium
Paspalum dilatatum
Setaria faberi
Setaria verdi
Setaria pumilia
Eleusine indica
Pennisetum clandestinum
Microstegium vimineum (Trin.) A.Camus var. *imberbe*
Avena fatua
Lolium spp.
Cenchrus spp.
Sporobolus indicus
Eriochloa gracilis

Cardamine spp.
Mollugo verticillata
Stellaria spp.
Taraxacum officinale
Geranium carolinianum
Lamium spp.
Polygonum aviculare
Lespedeza striata
Conyza canadensis
Medicago lupulina
Fatoua villosa
Brassica spp.
Oxalis pes-caprae
Alchemilla arvensis
Amaranthus retroflexus
Matricaria matricarioides
Portulaca oleracea
Sisymbrium irio
Capsella bursa-pastoris
Sonchus oleraceus
Veronica arvensis
Euphorbia hirta
Euphorbia humistrata
Euphorbia maculata
Epilobium spp.
Oxalis corniculata
Oxalis stricta

USES

Turfgrass

Use **Dithiopyr 2EW** on seeded, sodded, or sprigged lawns, ornamental turfgrass and unimproved turfgrass that are well established. Newly established turf must have developed a good root system and a uniform stand, and have received at least two mowings following seeding or sprigging before making the first application of this product. Note precautions below for sodding. Use of this product on turf that is not well-established, or has been weakened by weather, pest, disease, chemical, mechanical or other related stress, may result in turf injury.

Use Precautions:

- **Dithiopyr 2EW** will prevent the germination of annual bluegrass. **Dithiopyr 2EW** will not affect established annual bluegrass. If maintenance of annual bluegrass is desired, using this product during the time of annual bluegrass germination is not recommended. In the states of AZ, CA, NV, OR, WA, NM, ID, MT and UT, **Dithiopyr 2EW** may contribute to the thinning or stand reduction in established stands of annual bluegrass.
- To avoid turfgrass injury, do not apply to newly set sod until the sod has rooted and exposed edges have filled in.
- For best results, cultural practices that disturb the soil, such as verticutting and core-, spike-, or hydro-aerification, should be done before applying this product.

Use Restrictions:

- Do not apply this product to golf course putting greens.
- Do not harvest sod until 3 months or longer after application.
- Do not apply this product until the turfgrass has recovered from cultural practices such as verticutting or core-, spike-, or hydro-aerification.
- Do not use clippings from treated turf for mulching around vegetables or fruit trees.
- Do not apply this product through any type of irrigation system.
- Do not apply by air.
- Do not apply more than 2 pints (0.5 lb/ai/acre) of **Dithiopyr 2EW** per acre (0.73 fl. oz. per 1,000 sq ft) per application.
- Do not apply more than 6 pints (1.5 lb/ai/acre) of **Dithiopyr 2EW** per acre per year (2.2 fl. oz. per 1,000 sq ft).
- In New York State, do not apply more than 2 pints of **Dithiopyr 2EW** (0.5 lb. active ingredient) per acre per year. In Nassau and Suffolk counties of New York, do not exceed 1 pint per year of this product (equivalent to 0.25 lb. of active ingredient per acre).

Reseeding, Overseeding, or Sprigging

Reseeding, overseeding or sprigging of treated areas within 3 months after a single application of this product, or within 4 months after a sequential application program totaling more than 2 pints per acre (0.73 oz per 1000 sq ft), may inhibit the establishment of desirable turfgrasses. However, overseeding of bermudagrass with perennial ryegrass 8 weeks after an application or as early as 6 weeks after application if slight injury to perennial ryegrass can be tolerated is a recommended exception.

When reseeding or overseeding, proper cultural practices such as soil cultivation, irrigation and fertilization should be followed. For best results, use mechanical or power seeding equipment (slit seeders) designed to give good seed to soil contact.

Tolerant Turfgrass

Dithiopyr 2EW should only be applied to the following turfgrass species which are tolerant to this product.

Established Cool Season Turfgrasses

Common Name

bermudagrass, creeping[†]
bluegrass, Kentucky
fescue, fine^{††}
fescue, tall
ryegrass, perennial

Scientific Name

Agrostis palustris
Poa pratensis
Festuca rubra
Lolium arundinaceum
Lolium perenne

Established Warm Season Turfgrasses

Common Name

bahiagrass
bermudagrass^{†††}
buffalograss^{††††}
carpetgrass
centipedegrass
kikuyugrass
seashore paspalum
St. Augustinegrass
zoysiagrass

Scientific Name

Paspalum notatum
Cynodon dactylon
Buchloe dactyloides
Axonopus affinis
Eremochloa ophiuroides
Pennisetum clandestinum
Paspalum vaginatum
Stenotaphrum secundatum
Zoysia japonica

[†]Do not use this product on certain varieties of creeping bentgrass, such as cohansey, carmen, seaside, and Washington as undesirable turfgrass injury may result. Not all varieties of creeping bentgrass have been tested. Do not apply this product to colonial bentgrass (*Agrostis tenuis*) varieties.

^{††}Do not use this product on certain varieties of fine fescue as undesirable turf injury may result. The following fine fescue varieties have been found to be sensitive to this product: Atlanta, banner, beauty, biggart, CF-2, enjoy, HF-93, highlight, ivalo, Jamestown, koket, majenta, Mary, pennlawn, Tamara, Tatjana, waldorf, and waldina. Not all varieties of fine fescue have been tested.

^{†††}Do not use this product on Tifgreen (328) hybrid bermudagrass as undesirable turfgrass injury may result. Other common and hybrid bermudagrass varieties are tolerant.

^{††††}Do not use this product on seedling buffalograss in the spring of the first year of establishment until the turfgrass is fully green and has established new roots.

Application Directions

Apply **Dithiopyr 2EW** through conventional liquid application equipment in a minimum of 20 gallons of water per acre (0.5 gallons per 1000 sq. ft.). Apply with equipment that provides a uniform spray distribution. A hand held spray gun may be used. Calibrate application equipment prior to usage. Avoid streaking, skips, or excess overlaps during application. The use of marker dyes or foams aids in making more accurate applications.

Preemergence Application Rates, Frequency and Timing

For preemergence grass and broadleaf weed control, apply **Dithiopyr 2EW** as single or sequential application at 1 to 2 pints (0.25 to 0.5 lb active ingredient) per acre. Applicators may choose to make a single application or sequential applications of 1 to 2 pints per acre at 5 to 10 week intervals based on one or more of the factors listed below.

- Length of residual weed control desired
- Height of turf (lower cut turf may require higher use rates)
- History and success of weed control at the application site (higher application rates should be used if herbicide treatment history is unknown or weed control was poor with previous applications)
- Exposure to high temperatures and heavy rainfall or irrigation (this will shorten the residual preemergence performance)
- On turf sites adjacent to hard surfaces such as but not limited to driveways, sidewalks and parking lots where residual activity may be reduced
- Some target weed species (such as but not limited to *Poa annua*, goosegrass and sandbur) will require higher listed use rates

Postemergence Crabgrass Control

This product provides both preemergence and postemergence control of crabgrass (including large, smooth, and southern species) in established lawns and ornamental turf. This product provides postemergence control of crabgrass through the 3 to 5 tiller stage of growth dependent upon location. The addition of a nonionic surfactant at a minimum of 0.25% v/v (2 pt per 100 gallons of spray) is recommended to improve postemergence control past the 5 leaf stage of growth. Read and follow the surfactant manufacturer's label directions. Postemergence control of this product can be improved by not mowing turfgrass within two days before or after application.

When applied at 2 pints per acre this product has demonstrated postemergent crabgrass control through the 3 to 5 tiller stage of growth in the western, southern and transition regions where warm-season turfgrasses are the predominate species. In regions where cool-season turfgrasses are the predominant species, early postemergence crabgrass control is obtained when this product is applied prior to tiller initiation of crabgrass (less than 5 leaves per plant), which generally corresponds to the time when crabgrass seedlings are easily observed in lawn or turf.

For preemergence residual control of crabgrass, apply at least 0.5 inch of water after application; but in order to optimize postemergence control delay irrigation for 6 hours after application.

Poa annua (annual bluegrass) Control

Apply **Dithiopyr 2EW** for preemergence control of *Poa annua* (annual bluegrass) at a rate of 1.5 to 2 pints (0.38 to 0.5 lbs active ingredient) per acre.

- Apply 6 to 8 weeks before overseeding perennial ryegrass into bermudagrass. This is specific to perennial ryegrass; not recommended for *Poa trivialis* or bentgrass.
- Minimum seeding rate of perennial ryegrass is 400 lbs per acre.
- Use limited to fairways and roughs.
- Perennial varieties of *Poa annua* (var. repens) may not be controlled as well as the true annual variety.
- Do not apply earlier than 16 weeks after over-seeding unless injury to the ryegrass can be tolerated.
- A follow-up treatment 16 weeks after overseeding offers an early season crabgrass treatment and helps suppress some winter annual broadleaf weeds.

Goosegrass Control

For best results, apply **Dithiopyr 2EW** at 2 pints (0.5 lbs active ingredient) per acre just prior to goosegrass germination. Base the application timing on local experience or soil temperatures. If targeting both crabgrass and goosegrass, a single application applied at preemergence crabgrass timing may not be adequate. When targeting both crabgrass and goosegrass it is best to make sequential applications. Based on past experience and crabgrass pressure, a lower rate may be used for the first application with the sequential application being made at 2 pints per acre.

Use Directions for Noncrop and Natural Areas

Apply **Dithiopyr 2EW** for preemergence control of listed annual grasses and broadleaf weeds in noncrop land (see listing above) and natural areas as a single or sequential application.

Apply **Dithiopyr 2EW** prior to germination of target weeds or to bare ground. The best weed control is obtained when applications are made preemergence and to soil that is free of clods, weeds and debris such as leaves. For total vegetation control tank mixing this product with herbicides such as Glyphosate, Aminopyralid- potassium/Metsulfuron or Aminopyralid- trisopropanolamine is necessary.

To be effective, **Dithiopyr 2EW** must be activated by 0.5 inch or more of rainfall or irrigation prior to germination of target weeds. Once the treatment is activated, avoid excessive soil disruption such as grading roadsides that may break down the herbicide barrier. Minimal surface disruption such as raking should not break down the herbicide barrier.

Use Precautions:

- For ornamentals within non-crop areas, apply only after transplanting when soil around roots has been thoroughly settled by rainfall or irrigation and no cracks are present, and only to plants listed in the Tolerant Ornamental section of this label, or injury may result.

Use Restrictions:

- Do not apply when weather conditions favor drift to non-target areas. This product may injure foliage of non-target plants.
- Do not graze livestock or feed forage cut from areas treated with this product.

Equivalent Application Rates:

Equivalent Rates of Dimension 2EW			
(pt/acre)	(fl oz/1000 sq ft)	(fl oz/100 sq ft)	(ml/100 sq ft)
2	0.73	0.073	2.2

Make sequential applications at 3 to 4 month intervals for extended preemergence weed control. Do not exceed maximum use rates per year.

Maximum Use Rates

- **Split or sequential applications:** Do not use more than 0.73 fl. oz. of **Dithiopyr 2EW** per 1000 sq ft (2 pints per acre) per application or more than 2.2 fl. oz. of **Dithiopyr 2EW** per 1000 sq ft (6 pints per acre) per year.

USE DIRECTIONS FOR ORNAMENTALS (LANDSCAPE, FIELD GROWN, AND CONTAINER GROWN) AND CHRISTMAS TREES

Dithiopyr 2EW specialty herbicide provides preemergence control of listed annual grasses and broadleaf weeds in areas planted with tolerant ornamental plants listed on this label. It is intended for use on plants grown for aesthetic purposes in landscaped areas, in container or field grown production nurseries or in Christmas tree production. When applied as directed, the ornamental plants listed on this label have shown tolerance to applications of **Dithiopyr 2EW**.

Use Precautions:

- Apply **Dithiopyr 2EW** to established ornamentals only.
- Applications of **Dithiopyr 2EW** over-the-top of plants with newly forming buds may cause injury. Possible plant injury may be avoided by application as a directed spray to the soil surface beneath ornamental plant foliage.
- Injury may be incurred if **Dithiopyr 2EW** is applied in the following manner. Grower assumes all risk if **Dithiopyr 2EW** is applied to:
 - Unrooted liners or cuttings that have been planted in pots for the first time
 - Pots less than six inches wide

Use Restrictions:

- Do not apply this product to bare roots of ornamental plants as injury may result.
- Do not incorporate this product into the soil. Dilution of active ingredient and possible injury to plant roots may occur.
- Do not apply around ornamental plants that have been weakened or are under stress (due to drought, flooding, excessive fertilizer or soil salts, wind injury, hail, frost damage, winter injury, injury from previously applied pesticides or injury due to insects, heat stress, nematodes or diseases).
- Do not apply when weather conditions favor drift to non-target areas. This product may injure foliage of non-target plants unless they are listed on this label.
- Do not apply this product directly to plants that are grown for food (e.g., fruit trees or maple trees tapped for syrup).
- Do not apply this product in enclosed structures and greenhouses.
- Do not apply more than 2 pints (0.5 lb/ai/acre) of **Dithiopyr 2EW** per acre (0.73 fl. oz. per 1000 sq ft) per application and no more than 6 pints (1.5 lb/ai/acre) of **Dithiopyr 2EW** per acre (2.2 fl. oz. per 1000 sq ft) per year.
- In New York State, do not apply more than 2 pints of **Dithiopyr 2EW** (0.5 lb active ingredient) per acre per year. In Nassau and Suffolk counties of New York, do not exceed 1 pint per year of this product (equivalent to 0.25 lb of active ingredient per acre).

Shadehouse Areas

Dithiopyr 2EW may be applied in open shadehouse-type structures where the natural flow of air is unimpeded. Do not apply within three weeks prior to enclosing greenhouses or poly-type structures.

Treatment of Ornamental Species Not Listed on the Label for Dithiopyr 2EW: It is impossible to evaluate tolerance to this product on all ornamental plant species or varieties or under all possible growing conditions. Users who wish to use **Dithiopyr 2EW** on ornamental species not currently listed on this label may determine the suitability for use by treating a small number of ornamental plants at a similar rate. Prior to treatment of larger areas, treated plants should be observed for any symptoms of herbicidal injury, such as foliar damage, reduced vigor or stand reduction, for 30 to 60 days of normal growing conditions to determine if the treatment is acceptable to the grower. The user assumes the responsibility for any plant damage resulting from the use of **Dithiopyr 2EW** on plant species not currently listed on this label as tolerant.

Application Directions

Apply **Dithiopyr 2EW** as a directed spray or as a broadcast over-the-top spray to established ornamentals (see ornamental plant listing for acceptable application method). Make directed sprays to the soil at the base of the ornamentals.

To reduce injury potential:

- Apply to established ornamentals
- Apply product with calibrated equipment using a minimum of 1 gallon of water per 1000 sq. ft.
- Shortly after application apply overhead irrigation to activate the herbicide and wash **Dithiopyr 2EW** from plant surface onto soil surface.
- In the spring when buds are rapidly growing and expanding, over the top application of **Dithiopyr 2EW** may temporarily injure new growth of desirable plants. To reduce the possibility of injury at this time, wait to apply **Dithiopyr 2EW** over the top of newly emerged vegetation until it has hardened off, unless local experience indicates that the ornamental plant will not be injured by the over the top application.
- Do not apply to plants that are under stress such as heat, drought or frost damage.

Dithiopyr 2EW is a preemergence herbicide that controls weeds during germination. **Dithiopyr 2EW** does not control emerged broadleaf or grass weeds except crabgrass up to tiller initiation (up to 5 leaves per plant) in ornamental or bare ground settings. Apply prior to germination of target weeds. Optimum weed control is obtained when applications are made to soil that is free of clods, weeds and debris such as leaves. Prior to applying, control existing vegetation by cultivation, hand weeding, or use of a postemergence herbicide labeled for use in ornamentals. After applying **Dithiopyr 2EW**, excessive soil disruption may breakdown the herbicide barrier. Minimal surface disruption such as raking should not break down the herbicide barrier once the product has been activated with moisture. Following transplanting, care must be taken that soil or planting mixes have settled firmly through irrigation, rainfall or packing and that there are no cracks that would allow direct contact of this product to the plant roots or plant injury may occur.

Application Rates

Apply **Dithiopyr 2EW** prior to germination of target weed species. Make sequential applications at 3 to 4 month intervals for extended preemergence weed control. Do not exceed maximum use rates.

When treating a small area, apply **Dithiopyr 2EW** with a calibrated sprayer that assures accurate, uniform spray distribution. In general, **Dithiopyr 2EW** should be thoroughly mixed with water at 1.5 to 2 pints (0.5 to 0.73 oz of product per 1000 sq ft) per acre per application and applied at 20 to 40 psi in a minimum of 1 gallon of water per 1000 sq ft.

Equivalent Rates of Dithiopyr 2EW			
(pt/acre)	(fl oz/1000 sq ft)	(fl oz/100 sq ft)	(ml/100 sq ft)
2	0.73	0.073	2.2

Tolerant Ornamentals

When applied as directed under the conditions described on this label, ornamentals listed below have shown tolerance when grown in container, field, and landscape settings.

Acceptable application method noted by a (x)

Name	Tolerant Cultivars	Over the Top	Directed
abelia (<i>Abelia x grandiflora</i>)	nana grand surprise	x	x x
acacia, redolens (<i>Acacia redolens</i>)		x	x
abyssinian red banana (<i>Ensete</i>)	maureli	x	x
Agave† (<i>Agave bovicornuta</i>) (<i>A. gypsophila</i>) (<i>A. victoriae-reginae</i>) (<i>A. vilmoriniana</i>)	blue glow Queen Victoria royal	x x x x	x x x x
Ajuga carpet bugle (<i>Ajuga reptans</i>) (<i>Ajuga genevensis</i>)	bronze bronze beauty		x x
almond, flowering (<i>Prunus glandulosa</i>)			x
apple† (<i>Malus pumila</i>)			x
aralia, Japanese (<i>Fatsia japonica</i>)			x
arborvitae (<i>Thuja occidentalis</i>)	George Peabody nigra pyramidalis smaragh techny woodwardii	x	x x x x x x
arborvitae, dwarf golden (<i>Thuja orientalis</i>)	aurea nana	x	x
ash, green (<i>Fraxinus pennsylvanica</i>)			x
ash, autumn purple (<i>Fraxinus americana</i>)	autumn purple		x
aster, Chinese (<i>Callistephus chinensis</i>)	dwarf queen		x

(continued)

Name	Tolerant Cultivars	Over the Top	Directed
azalea (<i>Rhododendron</i> spp.)	brilliant buccaneer carror chimes (Belgian) Elsie Lee exbury fashion Girard's crimson hardijzer beauty hershey red higasa hinocrimson high tide Holland (hybrid) Marion Lee northern lights Nuccio's Wild Cherry orange cup orchid lights pink gumbo pride of Mobile snow southern charm	x	x x
azalea, flame (<i>Rhododendron calendulaceum</i>)			x
azalea, Kurume or kirishima (<i>Rhododendron obtusum</i>)	coral bells	x	x x
bamboo, heavenly (<i>Nandina domestica</i>)	compacta nana plum passion	x	x x x
banana shrub (<i>Michelia figo</i>)		x	x
barberry, Japanese (<i>Berberis thunbergii</i>)	aurea crimson pygmy dwarf pygmy green kobold pygmy red rose glow	x	x x x x x x x x
barberry, purple (<i>Berberis thunbergii</i> var <i>atropurpurea</i>)	atropurpurea		x
basket flower (<i>Gaillardia grandiflora</i>)			x
beach grass (<i>Ammophila breviligulata</i>)			x
bearberry (common) (<i>Arctostaphylos uva-ursi</i>)	Massachusetts		x

(continued)

Name	Tolerant Cultivars	Over the Top	Directed
bee balm (<i>Monarda didyma</i>)			x
begonia (<i>Begonia</i> spp.)			x
birch, river (<i>Betula nigra</i>)	dura heat	x	x
birch, European white (<i>Betula pendula</i>)			x
blackeyed Susan (<i>Rudbeckia hirta</i>)	goldstrum		x
blanket flower (<i>Gaillardia</i> spp.)			x
blood grass (<i>Imperata cylindrica</i>)	rubra	x	x
blue fescue (<i>Festuca ovina</i>)			x
bluebeard (<i>Caryopteris x clandonensis</i>)	dark knight	x	x
blueberry† (<i>Vaccinium</i> spp.)	bluecrop blue jay Jersey north blue northland		x x x x x
bottlebrush (<i>Callistemon citrinus</i>)	Little John	x	x
bougainvillea (<i>Bougainvillea</i> sp.)	James Walker pink dream purple queen rosenka Scarlet O' Hara	x x x x	x x x x
bower vine (<i>Pandorea jasminoides</i>)	rosea	x	x
boxwood, green beauty (<i>Buxus microphylla japonica</i>)	green beauty	x	x
boxwood, welleri (<i>Buxus sempervirens</i>)	winter gem common boxwood	x x	x x
broom (<i>Cytisus scoparius</i>) (<i>Genista pilosa</i>)	moonlight Vancouver gold		x x
cactus (<i>Echinocactus grusonii</i>)	golden barrel	x	x
camellia (<i>Camellia japonica</i>) (<i>Camellia sasanqua</i>)	debutante mathotiana supreme chansonette setsukgekka	x x x	x x x x

Name	Tolerant Cultivars	Over the Top	Directed
candytuft (Iberis sempervirens)	snow white		x
carex, variegated (Carex spp.)		x	x
carpet bugle (Ajuga reptans) (Ajuga genevensis)	bronze bronze beauty		x x
cedar, red (Juniperus virginiana)			x
celosia (Celosia spp.)			x
centaura (Centaurea montana)			x
cherry tree† (Prunus x yedoensis)	yoshino	x	x
Chinese pistache (Pistacia chinensis)			x
chrysanthemum (Chrysanthemum sp.)	mandarin time	x	x
cleyera (Cleyera japonica)	Leann	x	x
clivia (Clivia miniata)		x	x
cockscomb, plumosa (Celosia cristata)	scarlet plumosa		x
coleus (Coleus blumei)	red kewpie		x
columbine (Aquilegia spp.)			x
coneflower, purple (Echinacea purpurea)	magnus purple	x	x x
copper leaf (Acalypha wilkesiana)			x
coreopsis (Coreopsis spp.)	moonbeam		x
corn flower (Centaurea spp.)			x
cotoneaster (Cotoneaster apiculatus)			x
coyotebrush (Baccharis pilularis)			x
cycad (Cycas revoluta)			x
cypress, bald (Taxodium distichum)		x	x

(continued)

Name	Tolerant Cultivars	Over the Top	Directed
cypress, Italian (<i>Cupressus sempervirens</i>)	glauca tiny tower	x	x x
cypress, hinoki false (<i>Chamaecyparis obtusa</i>)	gracilis torulosa	x	x x
cypress, leyland (<i>Cupressocyparis leylandii</i>) hybrid		x	x
daffodil (<i>Narcissus</i> spp.)	King Alfred		x
damianita (<i>Chrisactinia mexicana</i>)			x
daylily (<i>Hemerocallis</i> spp.)	Aztec gold bright yellow (hybrid) single gold (evergreen) Wilson's yellow		x x x x
dianthus (sweet William) (<i>Dianthus</i> spp.) (<i>Dianthus gratianopolitanus</i>)	firewatch	x	x
delphinium (<i>Delphinium</i> spp.)	magic fountain		x
desert spoon (<i>Dasylirion wheeleri</i>)		x	x
dogwood (<i>Cornus florida</i>)			x
dogwood, American (<i>Cornus sericea</i>)	flavarimea		x
Douglas fir (<i>Pseudotsuga menziesii</i>)			x
dracaena (<i>Cordyline indivisa</i>) (<i>Cordyline australis</i>)		x x	x x
dusty miller (<i>Senecio cineraria</i>)		x	x
elm (<i>Ulmus parvifolia</i>)	drake		x
escallonia (<i>Escallonia x exoniensis</i>)	fradesi	x	x
eulaliagrass/maiden grass (<i>Miscanthus sinensis</i>)	gracillimus variegatus morning light	x x x	x x x

(continued)

Name	Tolerant Cultivars	Over the Top	Directed
euonymus (Euonymus fortunei)	Argenteo-variegata colorata emerald gaiety emerald n' gold gold edge golden princess tricolor		x x x x x x
(Euonymus japonicus)	vegetus Aureomarginata		x x
(Euonymus kiatschovicus)	microphylla variegata "Moness" silver princess silver king Manhattan	x x x	x x x
euryops, green leaved (Euryops pectinatus)	viridis	x	x
fan palm, European (Chamaerops humilis)			x
fan palm, Mexican (Washingtonia robusta)			x
fern (various) (Asparagus spp.)			x
fescue (Festuca glauca)			x
fescue, blue (Festuca cinerea)	Elijah blue		x
fetterbush (Leucothoe fontanesiana)	rainbow		x
figus (Ficus retusa)	nitidia		x
fir fraser (Abies fraseri)			x
fortnight lily (Moraea bicolor)		x	x
Forsythia (Forsythia x 'Arnold Dwarf) (Forsythia viridissima) (Forsythia xintermedia) (Forsythia x 'Meadowlark') (Forsythia x intermedia) (Forsythia suspensa)	arnold dwarf bronxensis dwarf lynwood gold meadowlark spring glory weeping	x	x x x x x
fountain grass, purple (Pennisetum setaceum)	rubrum	x	x
fringe flower, Chinese (Loropetalum chinense)	Chang's ruby ruby purple diamond	x x	x x
fuchsia (Fuchsia spp.)			x
galium (Galium orodoratum)			x

Name	Tolerant Cultivars	Over the Top	Directed
gardenia (Gardenia jasminoides)	August beauty Frost proof mystery radicans veitchii white gem	x x x x x x	x x x x x x
(Gardenia thunbergia)			
Garlic, variegated society† (Thulbaghia violacea)	variegata	x	x
gayfeather (Liatris spicata)	floristan violet	x	x
gazania (Gazania rigens leucolaena)	trailing gazania	x	x
geranium (Pelargonium x hortorum)			x
globe thistle (Echinops ritro)		x	x
gum (Eucalyptus citriodora)			x
hawthorn (Crataegus spp.)	cockspur white crimson cloud enchantress Jack Evans Washington white		x x x x x
hawthorn, Indian (Raphiolepis indica)	ballerina enchantress	x x	x x
heather, twisted (Erica cinerea)	Mediterranean pink		x
heliotrope (Heliotropum arborescens)	lowa		x
hemlock, Canada (Tsuga canadensis)			x
hibiscus (Hibiscus sp.)	blue bird brilliant hula girl Seminoles pink		x x x x
(Hibiscus rosa-sinensis)			
holly (Ilex x 'Nellie R. Stevens')	Nellie R. Stevens	x	x
(Ilex x attenuata)	fosteri Savannah	x	x x
holly, blue (Ilex x meserveae)	blue boy blue girl China girl		x x x
holly, cassine (Ilex cassine)		x	x

(continued)

Name	Tolerant Cultivars	Over the Top	Directed
holly, Chinese (Ilex cornuta)	Burfordii Carissa needlepoint	X x x	x x x
holly, Japanese (Ilex crenata)	compacta hellerie Japanese northern beauty sky pencil steeds	x x x x x	x x x x x
holly, yaupon (Ilex vomitoria)		x	x
honeysuckle (Lonicera xylosteum) (Lonicera japonica) (Lonicera tatarica) (Lonicera x brownii)	Claveyí dwarf Halliana Canadian white Zabelli dropmore scarlet	x	x x x x x
hop bush, purple (Dodonea viscosa)	purpurea	x	x
hosta (Hosta sieboldii) (Hosta lancifolia)	albo marginata		x x
ice plant (Carpobrotus edulis)		x	x
ice plant, rosea (Drosanthemum floribundum)		x	x
ice plant, white trailing (Delosperma alba)		x	x
ice plant, purple (Lampranthus productus)		x	x
ice plant, red spike (Cephalophyllimalstonii)		x	x
impatiens (Impatiens spp.) (l. balsamina)		x	x x
iris (Iris spp)	dwarf blue wedgewood		x x
ivy, English (Hedera helix)	Bulgaria thorndale		x x
jasmine, Asiatic (Trachelospermum asiaticum)		x	x
jasmine, star (Trachelospermum jasminoides)			x

(continued)

Name	Tolerant Cultivars	Over the Top	Directed
laurel, Carolina cherry (<i>Prunus caroliniana</i>)	bright n' tight	x	x
laurel, mountain (<i>Kalmia latifolia</i>)			x
laurel, Texas mountain (<i>Sophora secundiflora</i>)		x	x
leucothoe (<i>Leucothoe fontanesiana</i>)			x
ligustrum, Japanese (<i>Ligustrum japonicum</i>)			x
lily (<i>Agapanthus</i> spp.)	streamline		x
lily, Asiatic (<i>Lilium asiaticum</i>)		x	x
lily, Kaffir (<i>Clivia miniata</i>)		x	x
Lily of the Nile (<i>Agapanthus africanus</i>)	albus Peter Pan		x x
lilyturf (<i>Liriope muscari</i>)	blue moon evergreen giant lilac beauty majestic monroe white silvery sunproof variegata	x x x	x x x x x x x x
lilyturf, creeping (<i>Liriope spicata</i>)			x
magnolia (<i>Magnolia grandiflora</i>)	D.D. Blanchard	x	x
magnolia, saucer (<i>Magnolia x soulangeana</i>)		x	x
mandevilla (<i>Mandevilla splendens</i>) (<i>Mandevilla x amabilis</i>)	Red Riding Hood crimson jewel	x x	x x
maple, amur (<i>Acer ginnala</i>)	emerald elf	x	x
maple, Japanese (<i>Acer palmatum</i>)		x	x
maple, Norway (<i>Acer platanoides</i>)			x
maple, red† (<i>Acer rubrum</i>)	red sunset	x	x
maple, silver (<i>Acer saccharinum</i>)			x

(continued)

Name	Tolerant Cultivars	Over the Top	Directed
maple sugar† (<i>Acer saccharum</i>)			x
marguerite, blue (<i>Felicia amelloides</i>)		x	x
marigold (<i>Tagetes patula</i>)	Honeycomb variegata wheeleris dwarf		x x x
metrosideros (<i>Metrosideros collinus</i>)	'springfire'	x	x
mock orange† (<i>Philadelphus</i> spp)	golden snowflake double white		x x
mondo grass (<i>Ophiopogon japonicus</i>)		x	x
moss rose (<i>Portulaca grandiflora</i>)	sunnyside		x
mountainash (<i>Sorbus aucuparia</i>)			x
myrtle, crape (<i>Lagerstroemia indica</i>)	Byer's hardy lavender Byer's white faurei langer muskogee peppermint lace standard pink zuni	x x x x	x x x x x x x x
myrtle, wax (<i>Myrica californica</i>)			x
myrtle, willow (<i>Agonis flexuosa</i>)			x
narcissus (<i>Narcissus</i> spp.)			x
New Zealand flax (<i>Phormium</i> sp.) (<i>Phormium tenax</i>)	rainbow chief rainbow queen Jack Spratt	x x x	x x x
oak, laurel (<i>Quercus laurifolia</i>)		x	x
oak, pin (<i>Quercus palustris</i>)			x
oak, red (<i>Quercus rubra</i>)			x
oak, shumard (<i>Quercus shumardii</i>)		x	x
oak, southern (<i>Quercus virginiana</i>)			x

(continued)

Name	Tolerant Cultivars	Over the Top	Directed
oak, willow (<i>Quercus phellos</i>)		x	x
oleander (<i>Nerium oleander</i>)	hardy red Mrs. Roeding petite pink sister agnes	x	x x x x
oleaster hedge (<i>Elaeagnus X ebbengi</i>)		x	x
orange, jessamine† (<i>Murraya paniculata</i>)		x	x
osmanthus (<i>Osmanthus fragens</i>)		x	x
osmanthus, holly leaf (<i>Osmanthus heterophyllus</i>)	goshiki	x	x
osteospermum (<i>Osteospermum fruticosum</i>)	whirligig		x
pachysandra (<i>Pachysandra terminalis</i>)			x
palm, bangalow (<i>Archontophoenix cunninghamiana</i>)			x
palm, bismark (<i>Bismarckia nobilis</i>)			x
palm, California fan (<i>Washingtonia filifera</i>)		x	x
palm, cardboard (<i>Zamia furfuracea</i>)		x	x
palm, majesty (<i>Ravenea rivularis</i>)		x	x
palm, paurotis (<i>Acoelorrhaphe wrightii</i>)		x	x
palm, pindo 'blue' (<i>Butia capitata</i>)		x	x
palm, queen (<i>Syagrus romanzoffianum</i>)		x	x
pampas grass (<i>Cortaderia selloana</i>)	ivory feathers	x	x x
pansy (<i>Viola x wittrockiana</i>)			x
paper flower (<i>Bougainvillea glabra</i>)	Barbara Karst	x	x
peacht† (<i>Prunus persica</i>)			x
pepper tree, California (<i>Schinus molle</i>)		x	x

(continued)

Name	Tolerant Cultivars	Over the Top	Directed
periwinkle, dwarf (<i>Vinca minor</i>)			x
petunia (<i>Petunia x hybrida</i>)	picoti	x	x
philodendron, tree (<i>Philodendron selloum</i>)		x	x
photinia, red tip (<i>Photinia x fraseri</i>)			x
pieris (<i>Pieris taiwanensis</i>)			x
pieris, Japanese (<i>Pieris japonica</i>)	mountain fire	x	x
pine, Afghan (<i>Pinus eldarica</i>)		x	x
pine, aleppo (<i>Pinus halapensis</i>)		x	x
pine, Austrian black (<i>Pinus nigra</i>)		x	x
pine, Canary Island (<i>Pinus canariensis</i>)		x	x
pine, Japanese black (<i>Pinus thunbergiia</i>)		x	x
pine, loblolly (<i>Pinus taeda</i>)		x	x
pine, longleaf (<i>Pinus palustris</i>)			x
pine, mugo or Swiss Mt. (<i>Pinus mugo</i>)			x
pine, Scotch (<i>Pinus sylvestris</i>)			x
pine, slash (<i>Pinus elliottii</i>)			x
pine, Virginia (<i>Pinus virginiana</i>)			x
pine, white (<i>Pinus strobus</i>)		x	x
pineapple, guava† (<i>Feijoa sellowiana</i>)			x
pittosporum, (<i>Pittosporum tobira</i>)	golf ball shimi crème de menthe Wheeler's dwarf	x x x	x x x
plum, purple† (<i>Prunus cistena</i>)			x
plumbago, cape (<i>Plumbago auriculata</i>)	royal cape	x	x
plume grass (<i>Erianthus ravennae</i>)		x	x
Podocarpus (<i>Podocarpus henkelii</i>)	yellowwood	x	x
potentilla (<i>Potentilla fruticosa</i>) (<i>Potentilla nepalensis</i>)	abbotswood		x x

(continued)

Name	Tolerant Cultivars	Over the Top	Directed
privet (Ligustrum x vicaryii) (Ligustrum japonicum)	golden vicary regal texanum yellow tipped	x	x x x x
privet, glossy (Ligustrum lucidum)		x	x
pyracantha or firethorn (Pyracantha x 'Gnome') (Pyracantha coccinea) (Pyracantha koidzumii)	gnome lalandei victory	x	x x x
queen palm (Arecastrum rammanzoffianum)			x
quince, Japanese† (Chaenomeles japonica)			x
red hot poker Kniphofia uvaria)	flamenco	x	x
redbud, eastern (Cercis canadensis)			x
redwood, coast (Sequoia sempervirens)		x	x
rhododendron (Rhododendron spp)	album Cunningham white PJM purple gem silvery pink		x x x x x
rhododendron, Carolina (Rhododendron carolinianum)			x
rhododendron, catawba (Rhododendron catawbiense)			x
rhododendron, rhodie max - rosebay (Rhododendron maximum)			x
ribbon grass (Phalaris arundinacea)			x
rockcress (Arabis caucasica)	snowcap		x
rose† (Rosa banksiae)	luta		x
rose, groundcover (Rosa x Noare) (Rosa x Noaschnee) (Rosa x Noatrum)	flower carpet red flower carpet white flower carpet pink	x x x	x x x
rose, knockout shrub (Rosa spp. hybrid)	knockout	x	x
rose, rock (Cistus purpureus)	'brilliancy'	x	x
rosemary† (Rosmarinus officinalis)			x

(continued)

Name	Tolerant Cultivars	Over the Top	Directed
rosemary, bog (<i>Andromeda polifolia</i>)	nana		x
salvia (<i>Salvia farinacea</i>)	rhea		x
sedge, leather leaf (<i>Carex buchananii</i>)		x	x
sedum (<i>S. spurium</i>)	dragon blood red red carpet yellow		x x x
senecia (<i>Senecia kleinia</i>)		x	x
silk tree (<i>Albizia julibrissin</i>)		x	x
smoketree (<i>Cotinus coggyria obovatus</i>)	Grace	x	x
smoketree, royal purple (<i>Cotinus coggyria</i>)	royal purple		x
snapdragon (<i>Antirrhinum</i> spp.)			x
snow-in-summer (<i>Cerastium tomentosum</i>)		x	x
snowball, common (<i>Viburnum opulus</i>)	sterile	x	x
sourwood (<i>Oxydendrum arboreum</i>)			x
spiraea (<i>Astilbe X arendsii</i>)	fanall		x
spiraea (<i>Spiraea X vanhouttei</i>)	bridal wreath spiraea	x	x
spiraea (<i>Spiraea</i> spp.)	Anthony Waterer red dolchica froebeli pink goldenflame red snowmound white		x x x x x
spiraea, garland (<i>Spiraea X arguta</i>)			x
spruce, Black Hills (<i>Picea glauca</i> var <i>densata</i>)			x
spruce, Colorado blue (<i>Picea pungens</i>)	glauca	x	x
spruce, dwarf Alberta (<i>Picea glauca</i> v. <i>albertiana</i>)	conica	x	x
spruce, Norway (<i>Picea abies</i>)			x
spruce, white (<i>Picea glauca</i>)	conica		x

(continued)

Name	Tolerant Cultivars	Over the Top	Directed
spurge, Japanese (<i>Pachysandra terminalis</i>)	green sheen	x	x
sweet bay (<i>Laurus nobilis</i>)			x
sweetflag (<i>Acorus calamus</i>) (<i>A. gramineus</i>)	ogon	x	x x
sweetgum (<i>Liquidambar styraciflua</i>)			x
sweet olive† (<i>Osmanthus fragrans</i>)			x
sycamore (<i>Platanus occidentalis</i>) (<i>P.l racemosa</i>)	American California	x	x x
tea tree, New Zealand (<i>Leptospermum scoparium</i>)	ruby glow martini	x x	x x
tree fern (tiki fern) (<i>Asparagus virgatus</i>)			x
trumpet flower or Carolina Jessamine (<i>Gelsemium sempervirens</i>)			x
tulip (<i>Tulip spp</i>)	apeldoorn		x
tufted hairgrass (<i>Deschampsia caespitosa</i>)			x
verbena, shrub (<i>Lantana sellowiana</i>)			x
Verbena, St. Paul's (<i>Verbena peruviana.</i>)	St. Paul		x
viburnum (<i>Viburnum spp.</i>)	American cranberry bush arrowood European cranberry bush linden Mohican wright		x x x x x x
vinca (periwinkle) (<i>Vinca minor</i>)			x
weigela (<i>Weigela florida</i>)	java red	x	x
windmill palm (<i>Trachycarpus fortunei</i>)			x
wisteria, Japanese (<i>Wisteria floribunda</i>)	Texas purple	x	x
xylosma (<i>Xylosma congestum</i>)			x
yarrow (<i>Achillea spp.</i>)			x

(continued)

Name	Tolerant Cultivars	Over the Top	Directed
yaupon (Ilex vomitoria)	dwarf		x
yellow bells (Tecoma stans)		x	x
yesterday-today-and- tomorrow (Brunfelsia pauciflora)	floribunda	x	x
yew (Taxus cuspidata) (Taxus x media)	capitata denisiformis	x	x x
yucca, red (Hesperaloe parvifolia)		x	x

[†] Ornamental species only. Do not use on plants grown for food or feed.

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NOTES

NOTES

QUALI-PRO®

DITHIOPYR 2EW

SPECIALTY HERBICIDE



Provides control of listed annual grasses and broadleaf weeds in:

- Established lawns
- Commercial sod farms
- Ornamental and sports turf (including but not limited to sport fields, golf course fairways, roughs, tee boxes, unimproved turfgrass areas)
- Container grown ornamentals
- Field-grown ornamentals
- Landscape ornamentals
- Non-cropland such as: airports, barrow ditches, cemeteries, communication transmission lines, electrical power and utility rights-of-way, fencerows, gravel pits, hard-surface cracks, industrial sites, military lands, mining and drilling areas, non-irrigation ditch banks, gas and oil pads, parking lots, petroleum tank yards, pipelines, pump stations, railroads, roadsides, debris retention areas, service roads, solar fields, storage areas or yards, substations, vacant lots and other non-crop residential and commercial areas
- Natural areas (open space) such as: restoration sites, campgrounds, parks, prairie management, trails and trailheads, recreation areas, wildlife openings and wildlife habitat and management areas
- Christmas tree farms

In New York State, this product may be used by commercial applicators only, at no more than 2 pints (0.5 lb active ingredient) per acre per year. In Nassau and Suffolk counties of New York, do not exceed 1 pint per acre per year of this product (equivalent to 0.25 lb of active ingredient per acre).

ACTIVE INGREDIENT:	% BY WT.
dithiopyr: S,S'-dimethyl 2-(difluoromethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-	24.0%
OTHER INGREDIENTS:	76.0%
TOTAL:	100.0%

Contains petroleum distillates

Contains 240 grams per liter or 2 lb active ingredient per U.S. gallon.

EPA Reg. No.: 53883-500
EPA Est. No: 37429-GA-001

NET CONTENTS:
1 GALLON

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.)

Manufactured for:



ADAMA

Control Solutions Inc.

5903 Genoa-Red Bluff, Pasadena, TX 77507

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