

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

January 29, 2018

Lisa Adamson Regulatory Manager Control Solutions, Inc. 5903 Genoa-Red Bluff Pasadena, TX 77507-1041

Subject: Label Amendment – Updating WSP mixing and loading language

Product Name: Quali-Pro Dithiopyr 40 WSB

EPA Registration Number: 53883-374 Application Date: April 18, 2017

Decision Number: 537173

#### Dear Adamson:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is 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. The next label printing of this product must use this labeling 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.

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 the Federal Insecticide Fungicide and Rodenticide Act 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) list 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

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with FIFRA section 6. If you have any questions, please contact Emily Schmid at 703-347-0189 or by email at schmid.emily@epa.gov.

Sincerely,

Reuben Baris, Acting Product Manager 23

Herbicide Branch

Registration Division (7505P) Office of Pesticide Programs

Enclosure

# Quali-Pro® Dithiopyr 40 WSB

**Specialty Herbicide** 

Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to these MOAs have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of actions for each target week.

For control of listed annual grasses and broadleaf weeds in the following sites:

- established lawns
- commercial sod farms
- noncropland and industrial sites
- ornamental turf (including golf course fairways, roughs, tee boxes)
- landscape, field grown and container ornamentals.

In New York State, this product may only be used by commercial applicators at no more than 0.625 pounds per acre per year (10 ounces) or (2) 5-oz.water-soluble pouches per acre per year (0.25 pounds active ingredient).

# **ACTIVE INGREDIENT:**

Dithiopyr: 3,5-pyridinedicarbothioic acid, 2-(difluoromethyl)-4-	
(2-methylpropyl)-6-(trifluoromethyl)-S,S-dimethyl ester	40.0%
OTHER INGREDIENTS:	60.0%
TOTAL:	100.0%

Each 5 ounce water-soluble pouch contains 0.125 lb of active ingredient.

# KEEP OUT OF REACH OF CHILDREN CAUTION

Manufactured for:
Makhteshim Agan of North America, Inc.
4515 Falls of Neuse Road, Suite 300
Raleigh, NC 27609

NET CONTENTS: \_\_\_\_\_

EPA Reg. No. 53883-374

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Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. FORM 074

53883-374

EPA Est. No.

	FIRST AID
If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If on skin or clothing:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>

	Call a poison control center or doctor for treatment advice.		
	Call a poison control center or doctor immediately for treatment advice.		
If swallowed:	Have person sip a glass of water if able to swallow.		
ii Swalloweu.	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.		
	Move person to fresh air.		
If inhaled:	• If person is not breathing, call 911 or an ambulance, then give artificial respiration,		
ii iiiiiaieu.	preferably by mouth-to-mouth, if possible.		
	Call a poison control center or doctor for further treatment advice.		
HOT LINE NUMBER			

#### 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 SafetyCall® (866) 897-8050 for emergency medical treatment information.

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

Causes eye irritation. Harmful if absorbed through the skin. Avoid contact with skin, eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Avoid breathing dust. Remove contaminated clothing and wash clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE):

# Applicators and other handlers (other than mixer loaders) must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

#### Mixer and Loaders must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

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

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

# **USER SAFETY RECOMMENDATIONS** User should:

- Wash hands after handling and before eating, drinking, chewing gum, using tobacco or using the
- 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 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 adversely affect aquatic organisms in adjacent aquatic sites. 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 washwaters.

#### **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. Reformulation or repackaging of this product is prohibited. Do not apply this product in a way that will contact workers or other person, 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 equipments (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

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

- Coveralls
- Waterproof gloves
- Shoes plus socks

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

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

# Instructions for Using Water Soluble Packages Directly into Spray tanks:

Water Soluble Packages (WSPs) are designed to dissolve in water. Agitation may be used, if necessary, to help dissolve the WSP. Failure to follow handling and mixing instructions can increase your exposure to the pesticide products In WSPs. WSPs, when used properly, qualify as a closed mixing/loading system under the Agricultural Worker Protection Standard [40 CFR 170.607(d)].

# Handling Instructions

Follow these steps when handling pesticide products in WSPs.

- 1. Mix in spray tank only
- 2. Handle WSP(s) in a manner that protects package from breakage and/or unintended release of contents. If package is broken, put on PPE required for clean-up and then continue with mixing instructions.
- 3. Keep the WSP(s) in outer packaging until just before use.
- 4. Keep the WSP dry prior to adding to the spray tank.
- 5. Handle with dry gloves and according to the label instructions for PPE.
- 6. Keep WSP intact. Do not cut or puncture WSP.
- 7. Reseal the WSP outer packaging to protect any unused WSP(s).

#### Mixing Instructions

Follow the steps below when mixing this product, including if tank mixed with other pesticide products. If being tank mixed, the mixing directions 1 through 9 below take precedence over the mixing directions of the other tank mix products. WSPs may, in some cases, be mixed with other pesticide products so long as the directions for use of all mixed products do not conflict. Do not tank mix this product with products that prohibit tank mixing or have conflicting mixing directions.

- 1. If a basket or strainer is present in the tank hatch, remove prior to adding the WSP to the tank.
- 2. Fill tank with water to approximately one-third to one-half of the desired final volume of spray.
- 3. Stop adding water and stop any agitation.
- 4. Place intact/unopened WSP(s) into the tank.
- 5. Do not spray water from a hose or fill pipe to break or dissolve the WSP(s)
- 6. Start mechanical and recirculation agitation from the bottom of tank without using any overhead recirculation, if possible. If overhead recirculation cannon be turned off, close the hatch before starting agitation.
- 7. Dissolving the WSP(s) may take up to 5 minutes or longer, depending on water temperature, water hardness and intensity of agitation.
- 8. Stop agitation before tank lid is opened.
- 9. Open the lid to the tank, exercising caution to avoid contact with dusts or spray mix, to verify that the WSPs have fully dissolved and the contents have been thoroughly mixed into the solution.
- 10. Do not add other allowed products or complete filling the tank until the bags have fully dissolved and pesticide is thoroughly mixed.
- 11. Once the WSP have fully dissolved and any other products have been added to the tank, resume filling the tank with water to the desired level, close the tank lid, and resume agitation.
- 12. Use the spray solution when mixing is complete.
- 13. Maintain agitation of the diluted pesticide mix during transport and application
- 14. It is unlawful to use any registered pesticide, including WSPs, in a manner inconsistent with its label.

#### ENGINEERING CONTROL STATEMENT

Water soluble packets, when used correctly, qualify as a closed mixing/loading system under the Worker Protection Standard [40 CFR 170.607(d)]. Mixers and loaders handling this product while it is enclosed in intact water soluble packets may elect to wear reduced PPE of long-sleeved shirt, long pants, shoes, socks, a chemical-resistant apron, and chemical-resistant gloves. When reduced, PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

PRODUCT INFORMATION

This product is not for use by homeowners.

Note: In the state of New York, this product may be applied only by commercial applicators.

For control of crabgrass and other annual grasses and broadleaf weeds, use Quali-Pro® Dithiopyr 40 WSB specialty herbicide in the following sites:

- established lawns
- commercial sod farms
- non cropland and industrial sites
- ornamental turf (including golf course fairways, roughs, tee boxes)
- landscape ornamentals, field grown and container nursery ornamentals.

Quali-Pro Dithiopyr 40 WSB only controls crabgrass up to initiation of tillering, that is, when seedlings are first visible in established turfgrasses. Quali-Pro Dithiopyr 40 WSB will not control emerged weeds. For optimum effectiveness, apply Quali-Pro Dithiopyr 40 WSB prior to initiation of tillering, and make all other applications before germination of target weeds.

Quali-Pro Dithiopyr 40 WSB must be activated to be effective. Activation is achieved by watering-in from rainfall or irrigation (1/2 inch or more). Time applications to ensure that activation occurs before the tillering stage of crabgrass development or prior to germination of all other weeds.

#### Restrictions

- Do not apply this product until the grass has recovered from these cultural practices.
- Do not use clippings from treated turf for mulching around vegetables or fruit trees.
- Do not graze livestock or feed foliage cut from areas treated with this product.
- Non-target plant foliage may be injured from drift or direct sprays of this product. Do not apply
  this product when weather conditions favor drift to non-target areas.
- Do not apply this product on grasses grown for seed.
- Do not apply this product in enclosed structures and greenhouses.

# **Mixing Instructions**

**Handling of Water Soluble Pouches:** The enclosed pouches are made of water soluble materials. Do not allow pouches to become wet before the pouches are placed in the spray tank. Do not handle the pouches with wet hands or wet gloves. Unused pouches can be protected by resealing the over-wrap bag and keeping unused pouches stored in this bag until ready to add to the spray tank.

#### For Use of Quali-Pro Dithiopyr 40 WSB Alone with Water as the Carrier:

Do not use spray equipment unless it is clean from other pesticides before use. Follow these steps to mix Quali-Pro Dithiopyr 40 WSB with water:

- 1. Add ½ to ¾ the amount of clean water needed in the mixing tank.
- 2. Begin agitation and check that the system works properly by ensuring the liquid surface shows rolling or rippling.
- 3. Place the required number of unopened water-soluble pouches into the tank. Before adding any other component to the tank, check that the pouches are dissolved and the product is completely mixed. Water temperature and vigorousness of agitation will determine how long the water soluble pouches require to dissolve, but complete dissolution usually occurs within 10 minutes after addition to the spray tank. Add the rest of the required amount of water and then remove the hose from the mixing tank immediately after filling to avoid siphoning back into the water surface.
- 4. Continue agitation during application to ensure uniformity of the spray mixture and to prevent settling out of the product.

# For Use of Quali-Pro Dithiopyr 40 WSB Alone with Fluid Fertilizer as the Carrier:

First, the compatibility of Quali-Pro Dithiopyr 40 WSB with the desired fluid fertilizer must be determined. Follow the directions below in the section "Test for Physical Compatibility". If compatibility is acceptable, follow the mixing procedure listed below in the "Tank Mixture" section.

#### **Tank Mixtures**

Follow the directions for "Test for Physical Compatibility" to ensure that Quali-Pro Dithiopyr 40 WSB is compatible with the desired tank mixture partner product(s) in the appropriate carrier (water or fluid fertilizer). Then use the following steps to mix the components:

Note: Although Quali-Pro Dithiopyr 40 WSB is compatible with boron and spray oils, complete dissolution of the water soluble pouches must occur before addition of spray oils or products containing boron to the spray tank.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow he most restrictive directions for use and precautionary statements of each product in the tank mixture.

# **Mixing Procedures:**

- 1. Cover the filling port with a 20 to 35 mesh screen or wetting basket.
- 2. Use clean spray equipment and fill with half the amount of carrier.
- 3. Begin agitation and continue agitation during the addition and mixing of components and during spray applications.
- 4. If a compatibility agent is needed, add it first. Read and follow the product label for the selected compatibility agent before using. Check to ensure that the agitation system is working properly.
- 5. Add Quali-Pro Dithiopyr 40 WSB to the tank. Allow sufficient time for the water-soluble pouches to dissolve and their contents to mix completely before adding other components.
- 6. Add wettable powders (WP) or dry flowables (DF). When mixing Quali-Pro Dithiopyr 40 WSB, WP or DF formulations with fluid fertilizer, form a pre-mix of these products with water. This slurry is then slowly added to the spray.
- 7. Similarly, make a pre-mix of flowable (F) pesticide formulations, if added, with one part water, and add slowly to tank.
- 8. Add emulsifiable concentrates (EC) to the mixing tank.
- 9. Add water-soluble liquid (SL) pesticide formulations, then any surfactants, marker dyes or foams, or drift control additives and then complete the filling process by addition of the rest of the carrier.
- 10. To prevent siphoning of the tank mix into the carrier source, the hose from the mixing tank should be removed immediately after filling. Agitate the contents of the spray tank from the initial filling of the spray tank step through the application of the spray mixture. If the agitation is stopped and the spray mixture settles, ensure thorough agitation to re-suspend the spray mixture before continuing the application.

#### **Test for Physical Compatibility**

To check the compatibility of the tank mixture, test by mixing a proportionate amount of each component (including Quali-Pro Dithiopyr 40 WSB, fluid fertilizers, and other pesticides) in a small glass jar. Follow the instructions below.

#### Compatibility Test Mixing Instructions for 25 Gallons per Acre Spray Volumes

Type of Pesticide Formulation	If Rate per Acre is:	Amount of Pesticide Added to Test Jar: Level Teaspoons per Pint Jar of Carrier Solution
Dry	1 lb.	1-1/2
Liquid	1 qt.	1

Use this compatibility test when spray volume is 25 gallons per acre. Use the table above to determine the ratios of pesticides to be tank-mixed with this product. Refer to the pesticide label(s) for the approved use rate for the other pesticide(s) to be tank-mixed with Quali-Pro Dithiopyr 40 WSB. Then, calculate the amount of each pesticide to add to the test jar. For example, for a use rate of 1 lb. per acre of a dry pesticide, add 1-1/2 teaspoons to the jar, while for a use rate of 1 quart per acre of a liquid pesticide, add 1 teaspoon to the jar. The amount of Quali-Pro Dithiopyr 40 WSB added should be based on the use rate ratios for dry pesticides (that is, for a use rate of 1 lb. per acre, add  $1 \frac{1}{2}$  teaspoon to the jar). If the spray volume or herbicide rate changes, make the appropriate changes in the amount of ingredients for the jar test. Cap the jar and shake the mixture well to mix.

Compatibility of the tested components is determined if the jar mixture does not form crystals, flakes, sludge, gels, oily films or layers within 5 minutes after mixing.

A compatibility agent is recommended if the components are incompatible. Check that the selected agent is compatible with the mixture by repeating the jar test. Use one-half teaspoon of the compatibility agent per pint jar (equivalent to 2 pints per 100 gallons of spray solution). Do not use compatibility agents in mixtures that fail the jar test.

# Weed Control In Turf Grasses Use Directions for Turf Use and Turfgrass Safety

Before making the first application of Quali-Pro Dithiopyr 40 WSB, ensure that turfgrasses have developed a good root system and a uniform stand, and have been mowed at least two times following seeding, sodding or sprigging. Turf injury may result if Quali-Pro Dithiopyr 40 WSB is applied to turf that is not well-established, or has been weakened by weather-, pest-, disease-, chemical-, mechanical or other factors which lead to turf stress.

Quali-Pro Dithiopyr 40 WSB should only be applied as directed to established turfgrass species that have been determined to be tolerant to applications of this product. The following tables list tolerant turfgrass species.

Cool-Season Grasses	Warm-Season Grasses
Bentgrass, Creeping (a) (Agrostis palustris)	Bahiagrass (Paspalum notatum)
Bluegrass, Kentucky (Poa Pratensis)	Bermudagrass (c) (Cynodon dactylon)
Fescue, fine <b>(b)</b> (Festuca rubra)	Buffalograss (d) (Buchloe dactyloides)
Fescue, tall (Festuca arundinacea)	Carpetgrass (Axonopus affinis)
Ryegrass, perennial (Lolium perenne)	Centipedegrass (Eremochloa ophiuroides)
	Kikuyugrass (Pennisetum clandestinum)
	Seashore paspalum (Paspalum vaginatum)
	St. Augustinegrass (Stenotaphrum
	secundatum)
	Zoysiagrass (Zoysia japonica)

- a) Do not use Quali-Pro Dithiopyr 40 WSB on golf course putting greens consisting of creeping bentgrass.
- b) If Quali-Pro Dithiopyr 40 WSB is used on certain varieties of creeping bentgrass, such as 'Cohansey', 'Carmen', 'Seaside', and 'Washington', undesirable turfgrass injury may result. Since all varieties of creeping bentgrass have not been tested, use of Quali-Pro Dithiopyr 40 WSB is not recommended on all varieties. Do not apply this product to colonial bentgrass (Agrostis tenuis) varieties.
- c) If Quali-Pro Dithiopyr 40 WSB is used on certain varieties of fine fescue, undesirable turf injury may result. Since not all varieties of fine fescue have been tested, use of Quali-Pro Dithiopyr 40 WSB is not recommended for use on certain varieties. Some fine fescue varieties have been found to be sensitive to this product including 'Atlanta', 'Banner', 'Beauty', 'Bilgart', 'CF-2', 'Enjoy', HF-93', 'Highlight', 'Ivalo', 'Jamestown', 'Koket', 'Majenta', 'Mary', 'Pennlawn', 'Tamara', 'Tatjana', 'Waldorf', and 'Waldina'.
- d) Turfgrass injury may result if this product is used on the 'Tifgreen' (328) hybrid of bermudagrass and use of Quali-Pro Dithiopyr 40 WSB on this species is not recommended.

**e)** For seedling Buffalograss, use this product only after the spring of the first year of turfgrass establishment and once the turfgrass is fully green and has established new roots.

# Reseeding, Overseeding, or Sprigging

To ensure establishment of desirable turfgrasses, wait 10 weeks after a single application of Quali-Pro Dithiopyr 40 WSB, or 4 months after a split application program totaling more than 0.46 oz/1000 sq. ft. (1.25lb/acre) before reseeding, overseeding, or sprigging of treated areas.. EXCEPTIONS: In cases where slight injury to perennial ryegrass can be tolerated, overseeding of bermudagrass with perennial ryegrass may be carried out as early as 6 weeks after application. To prevent injury to perennial ryegrass, overseed Bermudagrass 8 weeks after the Quali-Pro Dithiopyr 40 WSB application.

Follow normal cultural practices when reseeding or overseeding (soil cultivation, irrigation and fertilization). Best results are achieved using mechanical or power seeding equipment (slit seeders) which give good seed to soil contact.

#### **Sod Production**

- For best results, establish sod for at least six (6) months before a Quali-Pro Dithiopyr 40 WSB application is made.
- Pre-Harvest Interval (PHI): Do not apply this product within three (3) months of harvest.

#### **Other Use Precautions**

Crabgrass is controlled by early postemergence applications of Quali-Pro Dithiopyr 40 WSB only if applied prior to the fifth leaf (first tiller) stage of growth of crabgrass.

Perform activities that disturb the soil (such as core-, spike-, or hydro-aerification, and verticutting) before application of this product.

# **Application Directions**

**Application Equipment and Instructions:** Quali-Pro Dithiopyr 40 WSB can be applied using conventional liquid application equipment. Use a sufficient volume of carrier solution to ensure a thorough and uniform spray application. Use of hand held spray guns are permitted. Because of the variability in application use rates and spray patterns do not apply Quali-Pro Dithiopyr 40 WSB using liquid application equipment with cluster spray nozzles or other boomless spray equipment. Calibrate application equipment prior to usage. Avoid streaking, skips, or excess overlaps during application. Use marker dyes or foams to assist in making more accurate applications.

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

# Control of Crabgrass Preemergence and Early Postemergence Control

Quali-Pro Dithiopyr 40 WSB controls crabgrass, including the large, smooth and southern species, when applied *preemergence* (prior to the emergence of crabgrass) in established lawns and ornamental turfs. Some *early postemergence* control of crabgrass is obtained from applications of Quali-Pro Dithiopyr 40 WSB but only in the early stages of crabgrass growth after the crabgrass has emerged. Because of the difficulty in detecting the very small, early stages of crabgrass in well-established lawns and ornamental turfs, apply Quali-Pro Dithiopyr 40 WSB for *early post-emergence* crabgrass control only before the tillering of crabgrass. This phase of crabgrass growth is typically the time when you can first easily see the crabgrass in the lawn turf. This *early post-emergence* activity of Quali-Pro Dithiopyr 40 WSB gives the user an additional 2-8 weeks longer period of time to make applications while still controlling crabgrass. The exact amount of additional time will depend on the weather and how fast the crabgrass grows.

#### **Application Frequency and Timing**

Use Quali-Pro Dithiopyr 40 WSB as a single application, as a split application, or as a sequential application for crabgrass control in the spring, summer, or fall.

#### **Spring Applications**

Apply Quali-Pro-Dithiopyr 40 WSB in the spring or early summer at the appropriate rate from one of the three control programs listed in the table "Programs for Crabgrass Control". The program selected will depend on the user's location, the mowing height of the turfgrass, and whether the application is considered to be preemergence or early postemergence. The total rate applied will impact the duration of residual weed control. This length of control may vary somewhat and is dependent on a number of factors such as weather, weed pressure, turfgrass competitiveness, and the user's location within a region.

**Program 1 can be used** for *preemergence* control at sites where turfgrass is cut relatively high such as homeowner lawns and will provide 3-5 months of preemergence crabgrass control. Early postemergence control of crabgrass up to the 3-leaf stage can be expected at sites where turfgrass is cut relatively high such as homeowner lawns.

**Program 2 can be used** for *preemergence* control at sites where turfgrass is cut relatively low such as golf fairways, and when turfgrass maintenance or weed control has been conducted during the previous year. Preemergence crabgrass control can last 4-6 months. Use this program for early *postemergence* control up to crabgrass tillering at sites where turfgrass is cut relatively high such as in residential lawns.

**Program 3 can be used** for *preemergence* control at sites where turfgrass is cut relatively low such as golf fairways and when turf maintenance or weed control has not been conducted during the previous year. Preemergence crabgrass control can last 4-6 months. Early postemergence control up to crabgrass tillering is provided at sites where turfgrass is relatively low such as golf fairways. If longer periods of control are needed, apply using subsequent, sequential pre- and/or postemergence applications. Improved weed control may be obtained if split applications are made. Use the rates in the table "Programs for Crabgrass Control" for split applications by making two applications 5-10 weeks apart.

# Programs for Crabgrass Control<sup>a</sup>

Region	Application Rates	Program 1	Program 2	Program 3
All states <sup>a</sup> and parts of state not	Sq. ft. per water- soluble pouch per treatment	29,040	21,780	14,520
listed in Transition,	Number of pouches per acre	1.5 b	2	3
South, Coastal South or West.	lbs. per acre	0.47	0.625	0.95
South of West.	lbs. ai/per acre	0.188	0.25	0.38
Transition States (includes DE, KS, KY, MD,	Sq. ft. per water- soluble pouch per treatment	21,780	14,520	10,900
MO, NJ, VA, Southeastern	Number of pouches per treated acre	2	3	4
PS, southern areas of IL, IN,	lbs. per acre	0.625	0.95	1.25
OH, & coastal areas of CT, & RI)	lbs. ai/per acre	0.25	0.38	0.5
South (includes	Sq. ft. per water- soluble pouch per treatment	14,520	21,780	17,424
AL, AR, GA, LA, MS, NC, NM,	Number of pouches per acre	3	2+2°	2.5+2.5 <sup>b,c</sup>
OK, SC, TN, & TX)	lbs. per acre	0.95	0.625+0.625	0.78+0.78
,	lbs. ai/per acre	0.38	0.25+0.25	0.31+0.31

Region	Application Rates	Program 1	Program 2	Program 3
Coastal South- (includes HI, FL,	Sq. ft. per water- soluble pouch per treatment	21,780	17,424	14,520
& southern coastal areas of	Number of pouches per acre	2+2°	2.5+2.5 <sup>b,c</sup>	3+3°
AL, GA, LA, MS, NC, SC, & TX)	lbs. per acre	0.625+0.625	0.78+0.78	0.95+0.95
140, 30, & 17)	lbs. ai/per acre	0.25+0.25	0.31+0.31	0.38+0.38
West (includes AZ, CA, & NV). In this	Sq. Ft. per water- soluble pouch per treatment	29,040- 21,780	21,780- 14,520	21,780
climatically diverse region,	Number of pouches per acre	1.5+2 <sup>b</sup>	2-3	2+2°
use the higher rates in local	lbs. per acre	0.47-0.625	0.625-0.95	0.625+0.625
areas with longer crabgrass seasons.	lbs. ai/per acre	0.18-0.25	0.25-0.38	0.25+0.25

- a) In New York State, do not apply more than 2 water-soluble pouches per acre or 0.23 oz/1000 sq ft (0.625 lb/acre) per year.
- b) Do not open the water-soluble bag. The entire water-soluble bag must be used and not measured out or broken open. Prepare tank mixes using whole numbers of bags to treat the appropriate number of acres.
- c) Preemergence applications totaling more than 0.5 lb ai/acre (greater than 1.25 lb/acre of Quali-Pro Dithiopyr 40 WSB) must be applied as a split application made at 5 to 10 weeks intervals. A maximum of 0.5 lb ai/acre (1.25 lb of Quali-Pro Dithiopyr 40 WSB) per application is allowed for early postemergence control.

### Maximum Use Rates (All Turf Uses)

- Do not apply more than 0.5 lb ai/ acre per application or more than 1.5 lb ai/acre per year using split or sequential applications. These maximum use rates are equivalent to 4 water-soluble pouches per acre or 0.46 oz/1000 sq ft (1.25 lb/acre of product) per application, and 12 water-soluble pouches per acre or 1.38 oz/1000 sq ft (3.75 lb/acre of product) per year, respectively.
- In New York State, do not apply more than 0.25 lb ai per year. This is equivalent to 2 water-soluble pouches (0.625 lb/acre) per acre or 0.23 oz/1000 sq ft of Quali-Pro Dithiopyr 40 WSB.

#### **Fall Applications**

For late summer or early fall (late August through November) applications, follow the "Program 3" use rates listed in the table "Programs for Crabgrass Control" for control of crabgrass through the early part of the next spring. Do not exceed maximum use rates as specified in the table "Programs for Crabgrass Control".

A spring application may follow this fall application to provide season-long weed control but in no case must the maximum use rate per year be exceeded.

# **Tank Mixtures of Postemergence Control of Crabgrass**

Quali-Pro Dithiopyr 40 WSB alone will provide early postemergence control of crabgrass when treated prior to the tillering stage of growth. Using tank-mixes of Quali-Pro Dithiopyr 40 WSB with either MSMA or Acclaim® provides postemergence control of tillered crabgrass up to 3 tillers.

If preemergence herbicides have been applied prior to a postemergence application, use the applicable Program 1 or Program 2 use rate of Quali-Pro Dithiopyr 40 WSB for your area; otherwise, apply the Program 3 use rate.

Test all combinations using the jar test in the "Test for Physical Compatibility" described above before using Quali-Pro Dithiopyr 40 WSB with fluid fertilizers and/or either MSMA or Acclaim® herbicide.

Observe all limitations, precautionary statements, and use restrictions on the tank-mix products' labels before using with Quali-Pro Dithiopyr 40 WSB. Check the labels for MSMA or Acclaim® for information on tolerance of specific turfgrass species. Improved control may be seen by the addition of a nonionic surfactant. Read and follow the surfactant manufacturer's label directions.

#### **Control of Other Grass and Broadleaf Weeds**

#### **Weeds Controlled**

Quali-Pro Dithiopyr 40 WSB will control or suppress the following annual grass and broadleaf weeds when applied according to the directions on this label and prior to weed emergence.

Note: Except for crabgrass up to tillering stage of development, other emerged broadleaf weed or grasses are not controlled by Quali-Pro Dithiopyr 40 WSB. For optimum control of crabgrass, ensure that the treated area is free of weeds before application.

Grasses	
Barley	Hordeum spp.
Barnyardgrass	Echinochloa crus-galli
Bluegrass, annual (1)	Poa annua
Brome	Bromus spp.
Crabgrass, large	Digitaria sanguinalis
Crabgrass, smooth	Digitaria ischaemum
Crabgrass , Southern	Digitaria ciliaris
Crowfootgrass	Dactyloctenium aegyptium
Dallisgrass (seedling)	Paspalum dilatatum
Goosegrass	Eleusine indica
Foxtail, giant	Setaria faberi
Foxtail, green	Setaria Verdi
Foxtail, yellow	Pennisetum dandestinum
Kikuyugrass	Pennisetum clandestinum
Mary's grass	Microstegium vimineum
Oat, wild	Avena fatua
Ryegrass (annual &	Lolium spp.
perennial)	
Sandbur	Cenchrus spp.
Smutgrass	Sporobolus indicus

(1) Annual Poa (*Poa annua*) in South and coastal South Regions is controlled for longer periods of time if Quali-Pro Dithiopyr 40 WSB is applied at 1.25 lb/acre (0.5 lb ai) 6 weeks before overseeding and then applied a second time at a rate of 0.625 to 1.25 lb/acre (0.25 to 0.5 lb ai) 120 days after over seeding. Overseeded perennial ryegrass may be injured (See "Reseeding, Overseeding or Sprigging" precautions above).

Broadleaf Weeds	
Bittercress	Cardamine spp.
Carpetweed	Mollugo verticillata
Chickweed	Stellaria spp.
Coneflower, purple	Rudbekia purpurea
Geranium, Carolina	Geranium carolinianum
Henbit	Lamium spp.
Knotweed, prostrate	Polygonum aviculare
Lespedeza, common	Lespedeza striata
Marestail	Conyza Canadensis

Medic, black	Medicago lupulina
Mustard	Brassica spp.
Oxalis, buttercup	Oxalis pes-caprae
Pineappleweed	Matricaria matricarioides
Pigweed, redroot	Amaranthus retroflexus
Parsley-piert	Alchemilla arvensis
Purslane, common	Portulaca oleracea
Rocket, London	Sisymbrium irio
Shepherdspurse	Capsella bursa-pastoris
Speedwell, corn	Veronica arvensis
Spurge, garden	Euphorbia hirta
Spurge, prostrate	Euphorbia humistrata
Spurge, spotted	Euphorbia maculate
Woodsorrel, creeping	Oxalis comiculata
Woodsorrel, yellow	Oxalis stricta

# Use Directions for Ornamental Plantings – Field and Container Grown

Quali-Pro Dithiopyr 40 WSB provides preemergence control of listed annual grass and broadleaf weeds in areas planted with tolerant ornamental plants (see table below) being grown for aesthetic purposes in containers or in landscaped areas.

Treatment of Turf or Ornamental Species not listed on the Label for Quali-Pro Dithiopyr 40 WSB The ornamentals listed in the table below have shown tolerance to Quali-Pro Dithiopyr 40 WSB in field trials when Quali-Pro Dithiopyr 40 WSB is applied under the conditions described on this label. However, not all cultivars of each species found in nursery or landscape settings have been tested with this product or under all possible growing conditions. Before using Quali-Pro Dithiopyr 40 WSB on a large scale, the user should test the product on a small scale or with only a few plants and under the growing conditions of the region where applied. Use the specified rate and observe signs of injury for 30-60 days after application. The user assumes all responsibilities for plant injury or other liability for use of Quali-Pro Dithiopyr 40 WSB on species not recommended on this label.

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

#### **Use Rates**

Apply Quali-Pro Dithiopyr 40 WSB in the spring, summer or fall before germination of target weed species. To maintain weed control, make split or sequential applications at 3 to 4 month intervals but do not exceed the maximum use rates per year (see table below).

Use calibrated sprayers to apply Quali-Pro Dithiopyr 40 WSB in order to ensure an accurate, uniform, spray distribution. Mix Quali-Pro Dithiopyr 40 WSB with clean water at the rate of 4 water-soluble pouches per acre (0.46 oz of product per 1000 sq. ft. (1.25 lb/acre)) per application. Use a minimum of one gallon of water per 1000 sq. ft. and apply at pressures between 20 and 40 PSI.

#### **Application Rates:**

Quali-Pro Dithiopyr 40 WSB Application Rates	Use Directions for Ornamentals
Rate per Acre	20 oz.
Rate per 1,000 sq. ft.	0.46 oz.
Sq. ft. per one 5 ounce water soluble pouch	10,890
Timing of Application	Make sequential applications 3 to 4 months apart to extend preemergence weed control
Maximum Use Rate	Do not apply more than 0.5 lb ai/a per application (equivalent to 4 water soluble pouches per A or 0.46 oz./1,000 sq. ft. per application).  Do not apply more than 1.5 lb ai/a per year using split or sequential applications (equivalent to 12 water soluble pouches per A or 1.375 oz./1,000 sq. ft. per year).

	In New York State, <b>do not</b> apply more than 0.25 lb ai per year (equivalent to 2 water-soluble pouches (0.625 lb/acre) per acre or 0.23 oz/1000 sq ft of Quali-Pro Dithiopyr 40 WSB.
Use Precautions	Do not apply when weather conditions favor drift to non-target areas. This product may injure foliage of non-target plants.  To avoid injury to ornamentals within non-crop areas, apply only after transplanting when soil around roots has been thoroughly settled by rainfall or irrigation.

#### **Application Timing and Recommendations**

Established, tolerant ornamentals may be treated with Quali-Pro Dithiopyr 40 WSB as an over the top spray or as a directed spray. Tolerant ornamentals are listed in the following table. Be sure that directed sprays are made to the soil at the base of the ornamentals to avoid contact or drift to foliage.

Quali-Pro Dithiopyr 40 WSB is a preemergence herbicide and controls weeds as they germinate; it will not control established weeds. For optimum weed control, apply Quali-Pro Dithiopyr 40 WSB before weeds germinate or direct sprays to soil that is free of clods, weeds and debris such as leaves. Prior to making an application, control existing vegetation by cultivation, hand weeding, or use of postemergence herbicide. Do not disturb (i.e., mix) the soil surface to expose untreated soil. Allow the soil or planting mixes to settle firmly after transplant to avoid cracks in the soil surface which could allow the product to contact and cause injury to the plant roots.

#### **Precautions**

- Before application, ensure that the ornamentals plants are firmly established, that is, when the soil around the roots are thoroughly settled by rainfall or irrigation.
- Direct application of product to bare roots of ornamental plants may result in injury to the plant.
- Do not mix or incorporate this product into soil to avoid dilution of the product in the soil and possible injury to plant roots.
- 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, nematodes or diseases) may be injured if treated with this product.

# **Tolerant Ornamentals**

The ornamentals listed in the table below have shown tolerance to Quali-Pro Dithiopyr 40 WSB in field trials when Quali-Pro Dithiopyr 40 WSB is applied under the conditions described on this label. However, not all cultivars of each species have been tested with this product nor under all possible growing conditions. Before using Quali-Pro Dithiopyr 40 WSB on a large scale, the user should test the product on a small scale with only a few plants and under the growing conditions of the region where used. Evaluate the plants for tolerance evaluation following the directions given above.

Use the following table to determine which of the two approved application methods should be utilized: over the top of the foliage, or directed (defined as spraying the product mixture to the soil that is located around and under the ornamental plant; the spray should not come in contact with the plant's foliage). Some cultivars may be treated when grown in containers.

<sup>+</sup> Note that applications are to be made to Ornamental species only. DO NOT USE ON FOOD-PRODUCING TREES AND PLANTS.

Ornamental Species and Varieties Tolerant to Quali-Pro Dithiopyr 40 WSB

		Recommended Application Method Noted by a Check $()$		Recommended Application to Field or Container Grown Ornamentals Noted by a Check (√)	
Name	Tolerant Cultivars	Over the top	Directed	Container grown	Field Grown
Abelia, dwarf (Abelia X grandiflora)	Nana		√		√

			Recommended Application Method Noted by a Check (√)		Recommended Application to Field or Container Grown Ornamentals Noted by a Check $()$	
Name	Tolerant Cultivars	Over the top	Directed	Container grown	Field Grown	
Abyssinian red banana (Ensete Ventricosium)	Maurelii	V	$\checkmark$	<b>V</b>	√	
Ajuga (Ajuga reptans Ajuga genevensis)	Bronze Bronze beauty		$\checkmark$		V	
Almond flowering ( <i>Prunus gladulosa</i> ) Apple <sup>+</sup>			$\checkmark$		√ √	
(Malus pumila)			$\sqrt{}$		V	
Arborvitae ( <i>Thuja occidentalis</i> )	Nigra Pyramidalis Smaragh Techny Woodwardii		V		<b>V</b>	
Arborvitae, golden (Thuja orientalis)	Aurea nana	√	$\checkmark$	√	√	
Aster, Chinese (Callistephus chinensis)	Dwarf queen		$\checkmark$		$\sqrt{}$	
Ash, green ( <i>Fraxinus</i> <i>Pennsylvanica</i> )			$\sqrt{}$		V	
Ash, mountain (Sorbus aucuparia)			$\checkmark$		$\checkmark$	
Ash, purple (Fraxinus americana)			V		V	
Azalea ( <i>Rhododendron</i> spp.)	Brilliant Buccaneer Carror Chimes (Belgian) Elsie lee Exbury Fashion Hardijzer beauty Hershey red Higasa Hinocrimson Holland (hybrid) Marion lee Northern lights Orange cup Orchid lights Snow Southern charm		√		√	
Azalea, flame (Rhododendron calendulaceum)			$\sqrt{}$		V	
Azalea, kirishima Bamboo,			√		√	
Heavenly			√		√	
Barberry	Aurea		√			

		Recommended Application Method Noted by a Check ( $$ )		Recommended Application to Field or Container Grown Ornamentals Noted by a Check (√)	
Name	Tolerant Cultivars	Over the top	Directed	Container grown	Field Grown
(Berberis thunbergii)	Dwarf pigmy Green Kobold Pygmy red Rose glow				
Barberry, purple	Atropurpurea		$\sqrt{}$		$\sqrt{}$
Basket flower (Gailardia grandiflora)			$\checkmark$		<b>V</b>
Beach grass ( <i>Ammophila</i> breviligulata)			$\sqrt{}$		V
Bearberry, common (Arctostaphylos uva- ursti)	Massachusetts		$\checkmark$		$\sqrt{}$
Bee balm ( <i>Monarda didyma</i> )			$\checkmark$		V
Begonia ( <i>Begonia</i> spp.)			√		V
Birch, river ( <i>Betula nigra</i> )			$\sqrt{}$		V
Blackeyed susan ( <i>Rudbeckia hirta</i> )	Goldstrum		$\sqrt{}$		V
Blanket flower ( <i>Gaillardia</i> spp)			$\sqrt{}$		$\sqrt{}$
Blueberry <sup>+</sup> ( <i>Vaccinium</i> spp.)	Bluecrop Blue jay Jersey North blue Northland		V		V
Blue fescue (Festuca ovina)			$\sqrt{}$		V
Bottlebrush ( <i>Callistemon</i> <i>citrinus</i> )			$\sqrt{}$		$\sqrt{}$
Boxwood, Japanese	Japonica		$\sqrt{}$		$\sqrt{}$
Boxwood,weller (Buxus sempervirens)	Winter gem	√	$\checkmark$	V	V
Broom ( <i>Cytisus</i> spp., <i>Genista pilosa</i> )	Moonlight Vancouver gold		<b>V</b>		V
Bugle carpet			√		√
Camellia	Debutante Supreme Setsukgekka		$\sqrt{}$		V
(Camellia japonica, Camellia sasanqua)	Chansonette Mathotiana	√	$\sqrt{}$	√	V
Candy tuft ( <i>Iberi</i> s spp.)	Snow White		√		V
Carex, variegated ( <i>Carex</i> )			<b>V</b>		V
Cedar, red			V		$\sqrt{}$

		Recommende Method Noted		Recommended Application to Field or Container Grown Ornamentals Noted by a Check (√)	
Name	Tolerant Cultivars	Over the top	Directed	Container grown	Field Grown
(Juniperus					
virginiana) Celosia					
(Celosia spp.)			$\sqrt{}$		$\sqrt{}$
Centaura			1		1
(Centaurea montana)			$\checkmark$		$\sqrt{}$
Cockscomb plumose	Scarlet plumose		<b>√</b>		V
(Celosia cristata)	Ocariet plantose		•		*
Coleus	Red kewpie		$\sqrt{}$		$\sqrt{}$
(Coleus blumei) Columbine	'				
(Aguilegia spp.)			$\sqrt{}$		$\sqrt{}$
Coneflower, purple					
(Echinacea purpurea)			$\sqrt{}$		$\sqrt{}$
Copper leaf					
(Acalypha			$\sqrt{}$		$\sqrt{}$
wilkesiana)					
Coreopsis	Moonbeam		$\sqrt{}$		$\sqrt{}$
(Coreopsis spp.)	Woonbeam		•		*
Corn flower			$\sqrt{}$		$\sqrt{}$
(Centaurea spp.)					·
Cotoneaster ( <i>Cotoneaster</i>			$\checkmark$		V
apiculatus)			V		V
Coyotebrush			ı		1
(Baccharis pilularis)			$\checkmark$		$\sqrt{}$
Cycads			√		V
(Cycas revolute)			V		V
Cypress, bald			$\sqrt{}$		$\sqrt{}$
(Taxodium distichum)			,		,
Cypress, Italian	Glauca		$\checkmark$		V
(Cupressus sempervirens)	Glauca		V		V
Cypress, Japanese					
false	0		$\sqrt{}$		.1
(Chamaecyparis	Gracilis		V		V
obtusa)					
Cypress Leyland			1		1
(Cupressocyparis			$\sqrt{}$		$\sqrt{}$
<i>leylandii)</i> Daffodil					
(Narcissus spp.)	King Alfred		$\checkmark$		$\sqrt{}$
Daylily	Spring glory	V	<b>√</b>	<b>√</b>	V
(Hemerocallis spp.)	Aztec gold		,	,	,
(	Bright yellow				
	(hybrid)		$\checkmark$		V
	Single gold		٧		, v
	(evergreen)				
Dianthus (awast	Wilson's yellow				
Dianthus (sweet William)			$\checkmark$		V
(Dianthus barbatus)			*		, v
Delphinium	Magic fountain		√		V

		Recommended Application Method Noted by a Check (√)		Recommended Application to Field or Container Grown Ornamentals Noted by a Check (√)	
Name	Tolerant Cultivars	Over the top	Directed	Container grown	Field Grown
(Delphinium elatum)					
Dogwood ( <i>Cornus florida</i> )			$\sqrt{}$		V
Dogwood, American (Cornus sericea)	flavarimaea		$\sqrt{}$		√
Douglas fir ( <i>Pseudotsuga</i> <i>menziesii</i> )			V		V
Dusty miller (Senecio cineraria)			$\sqrt{}$		$\sqrt{}$
Elm, drake ( <i>Ulmus parvifolia)</i>			$\checkmark$		$\sqrt{}$
Euryops ( <i>Europs pectinatus</i> )	Viridis	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$
Eulaliagrass ( <i>Miscanthus sinensis</i> )	Maiden grass gracillimus	V	$\checkmark$	√,	$\checkmark$
Euonymus ( <i>Euonymus fortunei</i> )	Argenteo- variegated auereo-marginata Colorata Emerald gaiety Emerald 'n glad Gold edge Silver king Tricolor Vegetus		$\checkmark$		V
Fan palm, European ( <i>Chamaerops humilis</i> )			$\sqrt{}$		$\sqrt{}$
Fan palm, Mexican ( <i>Washingtonia</i> <i>robusta)</i>			$\sqrt{}$		V
Fern, various ( <i>Asparagus</i> spp <i>.)</i>			$\checkmark$		$\sqrt{}$
Fescue ( <i>Festuca glauca)</i>			$\sqrt{}$		√
Fetterbush (Leucothoe fontanesiana)	Rainbow		$\checkmark$		V
Ficus ( <i>Ficus retusa)</i>	Nitidia		$\sqrt{}$		$\sqrt{}$
Fir fraser ( <i>Abies Fraseri)</i>			$\sqrt{}$		<b>√</b>
Forsythia	Spring glory	√	V	V	V
(Forsythia X intermedia)	Arnold dwarf Bronxensis dwarf Lynwood gold Meadowlark Weeping		V		V
Fountain grass (Pennisetum setaceum)	Rubrum	V	$\checkmark$	V	V
Fuchsia ( <i>Fuchsia</i> spp <i>.)</i>			$\sqrt{}$		$\sqrt{}$

		Recommended Application Method Noted by a Check (√)		Recommended Application to Field or Container Grown Ornamentals Noted by a Check (√)	
Name	Tolerant Cultivars	Over the top	Directed	Container grown	Field Grown
Gallium (Gallium ordoratum)			$\sqrt{}$		√
Garlic, Variegated Society ( <i>Thulbaghia</i> <i>violac</i> ea)	Variegata	V	V	√	V
Gardenia	White gem	$\checkmark$	$\checkmark$	$\sqrt{}$	√
(Gardenia jasminoides)	Mystery Radicans		$\checkmark$		√
Geranium ( <i>Pelargonium X</i> <i>hortorum)</i>			$\sqrt{}$		V
Gum ( <i>Eucalyptus</i> <i>citriodora)</i>			$\sqrt{}$		V
Hawthorn ( <i>Crataegus</i> spp.)	Cockspur white Crimson cloud Enchantress Jack Evans Washington white		$\checkmark$		√
Heather, twisted ( <i>Erica cinerea</i> )	Mediterranean Pink		$\sqrt{}$		√
Hemlock, Canada ( <i>Tsuga canadensis</i> )			√		√
Hibiscus ( <i>Hibiscu</i> s spp.)	Blue bird Brilliant Hula girl		$\sqrt{}$		√
Holly (Ilex spp., Ilex X meserveae, Ilex X attenuate)	Blue boy Blue girl Burfodii China girl Compacta Forsteri Hellerie Japanese northern Beauty Needlepoint Nellie r. Stevens Savannah		√		√
Holly, Chinese ( <i>Ilex cornuta</i> )			$\sqrt{}$		V
Holly, Japanese ( <i>Ilex crenata</i> )		$\sqrt{}$	$\sqrt{}$	√	√
Holly, yaupon ( <i>Ilex vomitoria</i> )			$\sqrt{}$		√
Honeysuckle (Lonicera japonica)	Clavey's dwarf Halliana Tatarian Canadian White Zebelli red Hosta		V		V
Hosta ( <i>Hosta</i> spp.,	Albo marginata		√		√

			Recommended Application Method Noted by a Check (√)		I Application to tainer Grown oted by a Check √)
Name	Tolerant Cultivars	Over the top	Directed	Container grown	Field Grown
Hosta lancifolia)					
Ice plant Ice plant, white Trailing (Carpobrotus edulis, Delosperma alba CT)		V	V	V	V
Impatiens (Impatiens spp.)			√		√
Iris ( <i>Iri</i> s spp.)	Dwarf blue Wedgewood		√		√
lvy, English ( <i>Hedera helix</i> )	Bulgaria Thorndale		<b>√</b>		√
Jasmine, Asian ( <i>Trachelospermum</i> asiaticum)			√		<b>V</b>
Jasmine, star (Trachelospermum jasminoides)			√		√
Juniper ( <i>Juniperu</i> s spp.	Arcadia Armstrong Bar harbor	√	√	√	√
(Juniperus Horizontalis)	Blue chip Blue pacific Blue rug Blue star				
	Broadmoor Buffalo Calgary carpet Emerald sea Emerald spreader Endora compacta Fruitlandi Green Gold tip Hetzi Hughes Manhattan blue Parsoni Pfitzeriana Plumose Prince of wales Procumbens dwarf San jose Sargent blue Sargent green Scandia Scopulorum Moonglow Scopulorum Skyrocket spartan		$\bigvee$		√
(Juniperus chinensis)	Tortulosa	√	√	V	√
	l	l	<u>I</u>	1	<u>I</u>

		Recommended Application Method Noted by a Check (√)		Recommended Application to Field or Container Grown Ornamentals Noted by a Check	
Name	Tolerant Cultivars	Over the top	Directed	Container grown	Field Grown
(Juniperus chinensis)	Tamariscifolia		$\checkmark$		V
Juniperus Sabina	Weberi Youngstown Yukon belle		√		V
King palm (Archontophoenix cunninghamiana)		$\checkmark$	$\sqrt{}$	√	√
Laurel, Australian ( <i>Pittosporum tobira</i> )		√	$\sqrt{}$	V	V
Laurel, Mountain Kalmia latifolia)			$\sqrt{}$		V
Leucothoe (Leucothoe fontanesiana)			$\sqrt{}$		V
Ligustrum, Japanese ( <i>Ligustrum</i> <i>japonicum</i> )			$\checkmark$		√
Lily, African	Streamline	<b>V</b>	$\sqrt{}$	V	V
(Agapanthus	Albus		$\sqrt{}$		$\sqrt{}$
<i>africanus)</i> Lily, African Blue	Peter pan		· √		√ √
Lily, Affican Blue Lily of the valley (Pieris japonica)	Mt. Fire		√ √		√ √
Lily turf	Majestic Silvery sunroof	√	$\sqrt{}$	√	√
(Liriope muscari	Evergreen giant Lilac beauty Monroe white Variegate		<b>V</b>		<b>V</b>
Liriope, green (Liriope spicata)		√	$\sqrt{}$	√	√
Maple, amur ( <i>Acer ginnala)</i>	Emerald elf	$\checkmark$	$\checkmark$	√	√
Maple, Japanese ( <i>Acer japonicum)</i>			V		V
Maple, Norway (Acer platanoides)			$\sqrt{}$		√
Maple, red <sup>+</sup> (Acer rubrum)	Red sunset	√	$\sqrt{}$	V	√
Maple, silver (Acer saccharinum)		√	√	√	√
Maple sugar <sup>+</sup> (Acer saccharum)			$\sqrt{}$		√
Marigold ( <i>Tagetes patula</i> )	Honeycomb Variegate Wheeler's dwarf		$\sqrt{}$		√
Mock Orange <sup>+</sup> ( <i>Philadelphus</i> spp.)	Golden Snowflake double White		$\checkmark$		√
Mondo grass ( <i>Ophiopogon</i> <i>japonicus</i> )			V		<b>V</b>

		Recommended Application Method Noted by a Check (√)		Recommended Application to Field or Container Grown Ornamentals Noted by a Check (√)	
Name	Tolerant Cultivars	Over the top	Directed	Container grown	Field Grown
Moss rose (Portulaca grandiflora)	Sunnyside		$\sqrt{}$		V
Myrtle, crape ( <i>Lagerstroemia</i> <i>indica</i> )	Faurei Langer Muskogee Standard pink		V		V
Myrtle, wax ( <i>Myrica cerifer</i> )			$\sqrt{}$		$\sqrt{}$
Nandina ( <i>Nandina domestica</i> )	Compacta nana		$\checkmark$		$\checkmark$
Narcissus ( <i>Narcissus</i> spp.)			$\sqrt{}$		$\sqrt{}$
Oak, laurel ( <i>Quercus laurifolia</i> )			$\sqrt{}$		√
Oak, pin ( <i>Quercus palustris</i> )			$\sqrt{}$		$\sqrt{}$
Oak, red (Quercus rubra)			$\sqrt{}$		$\sqrt{}$
Oak, southern (Quercus virginiana)			$\sqrt{}$		√
Oak, willow (Quercus phellos)	Handrinad		$\sqrt{}$		√
Oleander ( <i>Nerium oleander)</i>	Hardy red Petite pink Sister agnes		$\sqrt{}$		$\sqrt{}$
Osteospermum (Osteospermum fruticosum)	Wirligig		V		V
Pachysandra (Pachysandra terminalis)			$\sqrt{}$		V
Palm, bungalow Pampas grass			√ 		√ 
(Cortaderia selloana) Pansy			√ 		√
(Viola X wittrocklana)			√		√
Paper flower (Bougainvillea glabra) Peach <sup>+</sup>	Barbara karst James Walker	√	$\sqrt{}$	V	$\sqrt{}$
(Prunus persica)			$\sqrt{}$		$\sqrt{}$
Periwinkle, dwarf ( <i>Vinca minor</i> )			√		√
Petunia ( <i>Petunia X hybrida</i> )	Picoti		$\sqrt{}$		$\sqrt{}$
Photinia, red tip ( <i>Photinia X fraseri</i> )			$\sqrt{}$		$\checkmark$
Pieris ( <i>Pieris japonica)</i>			$\sqrt{}$		$\sqrt{}$
Pine, Afghan ( <i>Pinus eldarica</i> )		√	√ 	V	<b>V</b>
Pine, Australian		$\sqrt{}$	√		V

		Recommended Application Method Noted by a Check ( $$ )		Recommended Application to Field or Container Grown Ornamentals Noted by a Check $()$	
Name	Tolerant Cultivars	Over the top	Directed	Container grown	Field Grown
(Pinus nigra,					
Pieris taiwanensis)					
Pine, Japanese Black ( <i>Pinus thunbergiana</i> )		$\checkmark$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
Pine, loblolly (Pinus taeda)			$\sqrt{}$		$\sqrt{}$
Pine, longleaf ( <i>Pinus palustris</i> )			$\sqrt{}$		√
Pine mugo			√		<b>√</b>
(Pinus mugho) Pine, Scotch			√		√
( <i>Pinus sylvestris</i> ) Pine, slash			√		√
( <i>Pinus elliottii)</i> Pine, Swiss mt.					
( <i>Pinus mugo</i> ) Pine, Virginia			√		√ ,
(Pinus virginiana)			$\sqrt{}$		√
Pine, White (Pinus strobus)		√	$\sqrt{}$	V	√
Pineapple, guava † (Feijoa sellowiana)			$\sqrt{}$		$\sqrt{}$
Plumbago, cape ( <i>Plumbago auriculata</i> )	Royal cape	√	$\sqrt{}$	V	√
Pittosporum, Japan Potentilla		V	$\sqrt{}$	V	V
(Potentilla nepalensis, Potentilla fruticosa)	Abbotswood		$\sqrt{}$		$\sqrt{}$
Privet	Texanum	$\sqrt{}$	V	V	√
(Ligstrum japonicum)	golden vicary Regal Wax Yellow tipped		V		V
Privet glossy (Ligustrum lucidum)	,,		$\sqrt{}$		√
Pyracantha	Victory	$\sqrt{}$	V	V	√
(Pyracantha koidzumii)	Gnome Lalandei		$\sqrt{}$		V
Queen palm (Arecastrum rammanzoffianum)		√	$\sqrt{}$	√	V
Quince, Japanese +			<b>√</b>		√
Rhododendron (Rhododendron spp.)	Album Cunningham white Fashion Hardy Pjm Purple gem Silvery pink		√		√ √
Rhododendron, Carolina (Rhododendron carolinianum)	Givery print		$\checkmark$		V

		Recommended Application Method Noted by a Check (√)		Recommended Application to Field or Container Grown Ornamentals Noted by a Check (√)	
Name	Tolerant Cultivars	Over the top	Directed	Container grown	Field Grown
Rhododendron, Catawba (Rhododendron catawbiense)			V		V
Ribbon grass ( <i>Phalaris</i> <i>arundinacea</i> )			$\checkmark$		$\checkmark$
Rockcress ( <i>Arabi</i> s spp.)	Snowcap		$\sqrt{}$		V
Rhodie max (rosebay) ( <i>Rhododendron</i> <i>maximum</i> )			$\checkmark$		$\sqrt{}$
Rose <sup>+</sup> ( <i>Rosa banksiae</i> )	Luta		$\sqrt{}$		V
Rose, Knockout Shrub (Rosa spp. Hybrid)	Knockout	√	$\sqrt{}$	√	$\checkmark$
Rosemary <sup>+</sup> (Rosmarinus officinalis)			$\sqrt{}$		$\checkmark$
Rosemary, bog ( <i>Andromeda polifolia</i> )	Nana		$\sqrt{}$		V
Salvia (Salvia farinacea)	Rhea		$\sqrt{}$		V
Smoketree, royal purple (Cotinus coggyria)	Royal purple	<b>√</b>	$\sqrt{}$	<b>√</b>	V
Sedum (Sedum spurium)	Dragon blood red Red carpet Yellow		$\sqrt{}$		$\checkmark$
Snapdragon ( <i>Antirrhinum</i> spp <i>.)</i>			$\sqrt{}$		V
Sourwood ( <i>Oxydendrum</i> <i>arboretum</i> )			V		$\checkmark$
Spiraea ( <i>Astilbe X arendsii</i> )	Fanfall		$\sqrt{}$		V
Spiraea ( <i>Spiraea</i> spp. <i>)</i>	Anthony waterer Red Dolchica Froebeli pink Goldenglame red Snowmound white Van houtte white		$\checkmark$		V
Spiraea garland ( <i>Spiraea</i> spp.)			√		√
Spruce, black hills ( <i>Picea glauca</i> )			$\sqrt{}$		V
Spruce, Colorado blue ( <i>Picea pungens</i> )	Glauca	V	<b>V</b>	V	<b>V</b>
Spruce, Norway		$\sqrt{}$	√	√	√

	Tolerant Cultivars	Recommended Application Method Noted by a Check (√)		Recommended Application to Field or Container Grown Ornamentals Noted by a Check (√)	
Name		Over the top	Directed	Container grown	Field Grown
(Picea abies)					
Spruce, white	Conica		$\checkmark$		√
(Picea glauca)	Cornea		•		,
Sweetflag, grassy-le			$\sqrt{}$		$\checkmark$
Sweetgum			,		,
(Liquidambar			$\sqrt{}$		
styraciflua)					
Sycamore			1		,
(Platanus			$\sqrt{}$		$\sqrt{}$
occidentalis)					
Tree fern (tiki fern)			$\sqrt{}$		$\sqrt{}$
(Asparagus virgatus)					
Trumpet flower,					
evening ( <i>Gelsemium</i>			$\sqrt{}$		$\sqrt{}$
sempervirens)					
Tulip					,
( <i>Tulip</i> spp.)	Apeldoorn		$\sqrt{}$		$\sqrt{}$
Tufted hairgrass					
(Deschampsia			$\sqrt{}$		$\sqrt{}$
caespitosa)			·		,
Verbena, shrub			1		1
(Lantana sellowiana)			$\sqrt{}$		$\sqrt{}$
Vervain	Ct David		√		√
(Verbena spp.)	St. Paul		V		V
Viburnum	Opulus sterile	$\sqrt{}$	√	√	V
( <i>Vibumum</i> spp.)	American Cranberry bush Arrowood Common snowball European Cranberry bush Linden Mohican Wright		$\checkmark$		√
Vinca, periwinkle		$\sqrt{}$	$\sqrt{}$		<b>√</b>
(Vinca minor)					
Windmill palm ( <i>Trachycarpus</i> <i>fortunei</i> )			$\sqrt{}$		√
Yarrow					
( <i>Achillea</i> spp)			$\sqrt{}$		$\sqrt{}$
Xylosma					,
(Xylosma congestum)			$\sqrt{}$		$\sqrt{}$
Yaupon	5 .		1		I
(Ilex vomitoria)	Dwarf		$\sqrt{}$		$\sqrt{}$
Yew (Taxus cuspidata)	Capitata denisformis	√	$\sqrt{}$	V	√
(Taxus cuspidate Taxus X media)	-		$\sqrt{}$		√

# **Use Directions for Noncropland and Industrial Sites**

Quali-Pro Dithiopyr 40 WSB controls listed annual grasses and broadleaf weeds in terrestrial noncrop areas including but not limited to farm yards, fence rows, highway or roadside utility and railroad rights-of-way, airports, recreation areas, campgrounds, and industrial sites including lumber yards, tank farms, and storage areas. Refer to the tables below in the section on "Control of other Grasses and Broadleaf Weeds" for a list of weeds controlled.

Quali-Pro Dithiopyr 40 WSB is a preemergence herbicide and controls weeds as they germinate; it will not control established weeds. For optimum weed control, apply Quali-Pro Dithiopyr 40 WSB before weeds germinate or direct sprays to soil that is free of clods, weeds and debris such as leaves. Prior to making an application, control existing vegetation by cultivation, hand weeding, or use of postemergence herbicide.

Quali-Pro Dithiopyr 40 WSB contains the active ingredient dithiopyr which is only effective in weed control after the product is activated. Activation requires ½ inch or more of rainfall or irrigation applied to the weeds or soil before germination of target weeds. After activation of the treatment, do not disturb (i.e., mix) the soil surface to expose untreated soil.

This product is not for use by homeowners.

Note: In the state of New York, this product may be applied only by commercial applicators.

# **Control of Other Grass and Broadleaf Weeds**

# **Weeds Controlled**

Quali-Pro Dithiopyr 40 WSB will control or suppress the following annual grass and broadleaf weeds when applied according to the directions on this label and prior to weed emergence.

Grasses		
Barley	Hordeum spp.	
Barnyardgrass	Echinochloa crus-galli	
Bluegrass, annual	Poa annua	
Brome	Bromus spp.	
Crabgrass, large	Digitaria sanguinalis	
Crabgrass, smooth	Digitaria ischaemum	
Crabgrass , Southern	Digitaria ciliaris	
Crowfootgrass	Dactyloctenium aegyptium	
Dallisgrass (seedling)	Paspalum dilatatum	
Goosegrass	Eleusine indica	
Foxtail, giant	Setaria faberi	
Foxtail, green	Setaria Verdi	
Foxtail, yellow	Pennisetum dandestinum	
Kikuyugrass	Pennisetum clandestinum	
Mary's grass	Microstegium vimineum	
Oat, wild	Avena fatua	
Ryegrass (annual &	Lolium spp.	
perennial)		
Sandbur	Cenchrus spp.	
Smutgrass	Sporobolus indicus	

Broadleaf Weeds		
Bittercress	Cardamine spp.	
Carpetweed	Mollugo verticillata	
Chickweed	Stellaria spp.	
Coneflower, purple	Rudbekia purpurea	
Geranium, Carolina	Geranium carolinianum	
Henbit	Lamium spp.	
Knotweed, prostrate	Polygonum aviculare	
Lespedeza, common	Lespedeza striata	
Marestail	Conyza Canadensis	
Medic, black	Medicago lupulina	
Mustard	Brassica spp.	
Oxalis, buttercup	Oxalis pes-caprae	
Pineappleweed	Matricaria matricarioides	
Pigweed, redroot	Amaranthus retroflexus	
Parsley-piert	Alchemilla arvensis	
Purslane, common	Portulaca oleracea	
Rocket, London	Sisymbrium irio	
Shepherdspurse	Capsella bursa-pastoris	
Speedwell, corn	Veronica arvensis	
Spurge, garden	Euphorbia hirta	
Spurge, prostrate	Euphorbia humistrata	
Spurge, spotted	Euphorbia maculate	
Woodsorrel, creeping	Oxalis comiculata	
Woodsorrel, yellow	Oxalis stricta	

# **Mixing Instructions**

**Handling of Water Soluble Pouches:** The enclosed pouches are made of water soluble materials. Do not allow pouches to become wet before the pouches are placed in the spray tank. Do not handle the pouches with wet hands or wet gloves. Unused pouches can be protected by resealing the over-wrap bag and keeping unused pouches stored in this bag until ready to add to the spray tank.

# **Mixing Instructions**

#### For Use of Quali-Pro Dithiopyr 40 WSB Alone with Water as the Carrier:

Do not use spray equipment unless it is clean from other pesticides before use. Follow these steps to mix Quali-Pro Dithiopyr 40 WSB with water:

- 1. Add ½ to ¾ the amount of clean water needed in the mixing tank.
- 2. Begin agitation and check that the system works properly by ensuring the liquid surface shows rolling or rippling.
- 3. Place the required number of unopened water-soluble pouches into the tank. Before adding any other component to the tank, check that the pouches are dissolved and the product is completely mixed. Water temperature and vigorousness of agitation will determine how long the water soluble pouches require to dissolve, but complete dissolution usually occurs within 10 minutes after addition to the spray tank. Add the rest of the required amount of water and then remove the hose from the mixing tank immediately after filling to avoid siphoning back into the water surface.
- 4. Continue agitation during application to ensure uniformity of the spray mixture and to prevent settling out of the product.

#### For Use of Quali-Pro Dithiopyr 40 WSB Alone with Fluid Fertilizer as the Carrier:

First, the compatibility of Quali-Pro Dithiopyr 40 WSB with the desired fluid fertilizer must be determined. Follow the directions below in the section "Test for Physical Compatibility". If compatibility is acceptable, follow the mixing procedure listed below in the "Tank Mixture" section.

#### **Tank Mixtures**

Follow the directions for "Test for Physical Compatibility" to ensure that Quali-Pro Dithiopyr 40 WSB is compatible with the desired tank mixture partner product(s) in the appropriate carrier (water or fluid fertilizer). Then use the following steps to mix the components:

Note: Although Quali-Pro Dithiopyr 40 WSB is compatible with boron and spray oils, complete dissolution of the water soluble pouches must occur before addition of spray oils or products containing boron to the spray tank.

#### Mixing Procedures:

- 1. Cover the filling port with a 20 to 35 mesh screen or wetting basket.
- 2. Use clean spray equipment and fill with half the amount of carrier.
- 3. Begin agitation and continue agitation during the addition and mixing of components and during spray applications.
- 4. If a compatibility agent is needed, add it first. Read and follow the product label for the selected compatibility agent before using. Check to ensure that the agitation system is working properly.
- 5. Add Quali-Pro Dithiopyr 40 WSB to the tank. Allow sufficient time for the water-soluble pouches to dissolve and their contents to mix completely before adding other components.
- 6. Add wettable powders (WP) or dry flowables (DF). When mixing Quali-Pro Dithiopyr 40 WSB, WP or DF formulations with fluid fertilizer, form a pre-mix of these products with water. This slurry is then slowly added to the spray.
- 7. Similarly, make a pre-mix of flowable (F) pesticide formulations, if added, with one part water, and add slowly to tank.
- 8. Add emulsifiable concentrates (EC) to the mixing tank.
- 9. Add water-soluble liquid (SL) pesticide formulations, then any surfactants, marker dyes or foams, or drift control additives and then complete the filling process by addition of the rest of the carrier.
- 10. To prevent siphoning of the tank mix into the carrier source, the hose from the mixing tank should be removed immediately after filling. Agitate the contents of the spray tank from the initial filling of the spray tank step through the application of the spray mixture. If the agitation is stopped and

the spray mixture settles, ensure thorough agitation to re-suspend the spray mixture before continuing the application.

#### **Test for Physical Compatibility**

To check the compatibility of the tank mixture, test by mixing a proportionate amount of each component (including Quali-Pro Dithiopyr 40 WSB, fluid fertilizers, and other pesticides) in a small glass jar. Follow the instructions below.

# Compatibility Test Mixing Instructions for 25 Gallons per Acre Spray Volumes

Type of Pesticide Formulation	If Rate per Acre is:	Amount of Pesticide Added to Test Jar: Level Teaspoons per Pint Jar of Carrier Solution
Dry	1 lb.	1-1/2
Liquid	1 gt.	1

Use this compatibility test when spray volume is 25 gallons per acre. Use the table above to determine the ratios of pesticides to be tank-mixed with this product. Refer to the pesticide label(s) for the approved use rate for the other pesticide(s) to be tank-mixed with Quali-Pro Dithiopyr 40 WSB. Then, calculate the amount of each pesticide to add to the test jar. For example, for a use rate of 1 lb. per acre of a dry pesticide, add 1-1/2 teaspoons to the jar, while for a use rate of 1 quart per acre of a liquid pesticide, add 1 teaspoon to the jar. The amount of Quali-Pro Dithiopyr 40 WSB added should be based on the use rate ratios for dry pesticides (that is, for a use rate of 1 lb. per acre, add 1 ½ teaspoon to the jar). If the spray volume or herbicide rate changes, make the appropriate changes in the amount of ingredients for the jar test. Cap the jar and shake the mixture well to mix.

Compatibility of the tested components is determined if the jar mixture does not form crystals, flakes, sludge, gels, oily films or layers within 5 minutes after mixing.

A compatibility agent is recommended if the components are incompatible. Check that the selected agent is compatible with the mixture by repeating the jar test. Use one-half teaspoon of the compatibility agent per pint jar (equivalent to 2 pints per 100 gallons of spray solution). Do not use compatibility agents in mixtures that fail the jar test.

#### **Application Directions**

**Application Equipment and Instructions:** Quali-Pro Dithiopyr 40 WSB can be applied using conventional liquid application equipment. Use a sufficient volume of carrier solution to ensure a thorough and uniform spray application. Use of hand held spray guns are permitted. Because of the variability in application use rates and spray patterns do not apply Quali-Pro Dithiopyr 40 WSB using liquid application equipment with cluster spray nozzles or other boomless spray equipment. Calibrate application equipment prior to usage. Avoid streaking, skips, or excess overlaps during application. Use marker dyes or foams to assist in making more accurate applications.

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

Quali-Pro Dithiopyr 40 WSB	Use Directions and Precautions for Noncropland and
Application Rates	Industrial Sites
Rate per Acre	20 oz.
Rate per 1,000 sq. ft.	0.46 oz.
Sq. ft. per 1 water soluble pouch	10,890
Timing of Application	Make sequential applications 3 to 4 months apart to extend
	preemergence weed control
Maximum Use Rate	<b>Do not</b> apply more than 0.5 lb ai/a per application (equivalent to
	4 water soluble pouches per A or 0.46 oz./1,000 sq. ft.)
	<b>Do not</b> apply more than 1.5 lb ai/a per year (equivalent to 12
	water soluble pouches per A or 1.375 oz./1,000 sq. ft.)
Precautions	To avoid injury to ornamentals within non-crop areas, apply only

	after transplanting when soil around roots has been thoroughly settled by rainfall or irrigation.
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.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store this product only in its original container in a dry, cool, secured storage area. Store this product above 32°F.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product that cannot be used or chemically reprocessed must be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

**CONTAINER HANDLING:** Nonrefillable Container (flexible-bag-all weights): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Then dispose of empty outer bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Container (rigid-fifty lbs. or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ½ 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.

Nonrefillable Container (rigid-greater than fifty lbs.): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ½ 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.

**Refillable Container:** Refillable container. Refill this container with dithiopyr 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 mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

#### LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following **CONDITIONS**, **DISCLAIMER OF WARRANTIES**, and **LIMITATIONS OF LIABILITY**.

**CONDITIONS**: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Makhteshim Agan of North America, Inc. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES**: To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Makhteshim Agan of North America, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY**: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Makhteshim Agan of North America, Inc.'s election, the replacement of product.

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Quali-Pro Dithiopyr 40 WSB (66222-213) (EPA Approved 03/20/07) (EPA Transfer 01/04/10) (Notif to EPA 02/01/10)