



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JUN 24 2010

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Morris Gaskins Registrations Manager Albaugh, Inc. P.O. Box 2127 Valdosta, GA 31604-2127

Subject: Label Notification(s) for Pesticide Registration Notice 2007-4

Dear Mr. Gaskins:

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notice (PRN) 2007-4 dated April 21, 2010 for:

# EPA Registration 42750-171 Quinclorac 4L SWF

The Registration Division (RD) has conducted a review of this request for applicability under PRN 2007-4 and finds that the label change(s) requested falls within the scope of PRN 2007-4. The label has been date-stamped "Notification" and will be placed in our records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on nonrefillable containers. The code may appear either on the label (and can be added by non-notification/PR Notice 98-10) or durably marked on the container itself.

If you have any questions, please contact me directly at 703-305-6249 or Nicole Williams of my staff at 703-308-5551.

Sincerely,

Linda Arrington

Notifications & Minor Formulations Team Leader

Registration Division (7505P) Office of Pesticide Programs

Please read instructions on re	verse hefore comple	a form		Form Ap	nzoved	CAR No. 2	070-008	0. Approval expires 2-28-95
O EDA	υ E <b>nvironmental</b>	nited States	•	YIII AV		Registra Amendn Other	tion	OPP Identifier Number
		Application	n for Pestic	ide - Sec	tion	1	<u> </u>	
1. Company/Product Number 42750-171			1	Product Man	nager		3. Pr	roposed Classification
4. Company/Product (Name) Quinclorac 4L SWF			<b>PM#</b> 25				_   '	
5. Name and Address of Applicant (Include ZIP Code)  Albaugh Inc. P.O. Box 2127  Valdosta, GA 31604-2127  Check if this is a new address			6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:  EPA Reg. No.  Product Name					
		······································	Section -					
Amendment - Explain be Resubmission in respon  Notification - Explain be  Explanation: Use additional	alow.		I and Section II.)	Final printe Agency lett "Me Too" / Other - Exp	ter date Applica	ition.	NOTI	FICATION 2 4 2010
Label notification to revise Com This notification is consistent we requirements of EPA's regulation confidential statement of formula understand that if the amended and I may be subject to enforce	ith the provisions of P ons at 40 CFR 156.10 la of this product. I un label is not consisten	R Notice 2007- , 156.140, 156. derstand that i t with 40 CFR	4. This notification 144, 156.146, and t is a violation of 18 156.10, 156.140, 19	is consistent 156.156. No 6 U.S.C. Sec. 1 56.144, 156.14	with the other cl 1001 to	e guidance in l hanges have b willfully make	een mad any false	e to the labeling or the statement to EPA. I further
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	tainer	<u> </u>	5 gal, 30 gal, bul			cation of Labe	ol Direction	ons
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Name Morris Gaskins			Title Registrations Ma	nager		٥.	229-244-	e No. (Include Area Code) 3288 ° ° ° °
I certify that the stateme I acknowledge that any k both under applicable lav	knowlinglly false or n	Certificat this form and a nisleading stat	all attachments th	ereto are true nishable by fi	o, accu ne or it	rate and com	plete. or	6. Date Application Received  (Stamped)
2. Signature	4/248	i	. <b>Title</b> Registrations Man	ager				
4. Typed Name Morris Gaskins		5	. Date 4/2	1/10				

## **CORPORATE OFFICE**

1525 NE 36th Street Ankeny, IA 50021 515.964.9444 - Office 800.247.8013 - Toll Free 515.964.7813 - Facsimile



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304 Janet Street, Suite H
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Fed-X

April 21, 2010

Document Processing Desk (NOTIFY)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501

RE:

PR Notice 2007-4

Dear Sirs,

The enclosed submissions for the below referenced registration is a label notification in response to the Agency's PR Notice 2007-4 for Container Disposal revision.

PRODUCT	EPA REG. NO.
Quinclorac 4L SWF	42750-171

Three copies of the draft label with changes noted with strikeout/bold text are enclosed.

Please call if you have any questions.

Regards,

Morris Gaskins

Registrations Manager

Albaugh, Inc.



# QUINCLORAC 4L SWF Herbicide

For weed control in fallow systems, grass grown for seed, pre-plant wheat (see use directions for geographic limitations), pre-plant and in-crop sorghum, and non-crop areas in the following states: CO, DE, ID, IL, KS, MD, MN, MO, MT, ND, NE, NM, NV, OK, OR, PA, SD, UT, WA, WY, VA and designated counties in TX.

**ACTIVE INGREDIENT:** 

 3,7-dichloro-8-quinolinecarboxylic acid
 40.0%

 OTHER INGREDIENTS:
 60.0%

 TOTAL:
 100.0%

Contains 3.8 pounds of quinclorac per gallon

KEEP OUT OF REACH OF CHILDREN.

NOTIFICATION

CAUTION

JUN 2 4 2010

## FIRST AID

#### IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

## IF ON SKIN OR CLOTHING:

- · Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

## IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

## IF INHALED:

- · Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

In Case of Emergency regarding this product, call: CHEMTREC 800-424-9300

EPA Reg. No. 42750-171

EPA Est. NO. xxxxx-xx-xxx

AD061710

NET CONTENTS: \_\_\_ gal.

Manufactured For: ALBAUGH, INC. ANKENY, IA 50021

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#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, clothing, or eyes. Avoid breathing vapor or spray mist.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

- · Long-sleeved shirt and long pants
- Chemical-resistant gloves Category A, such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber ≥14 mils
- Shoes plus socks

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

## **ENGINEERING CONTROLS STATEMENT**

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

#### USER SAFETY RECOMMENDATIONS

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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 chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Keep out of lakes, ponds and streams. Do not apply directly to water, areas where surface water is present, or to intertidal areas below the mean high water mark, except as specified on this label for use in rice. Do not contaminate water by cleaning of equipment or disposal of rinsate.

## **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

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

All applicable directions, restrictions, precautions and Conditions of Sales and Warranty are to be followed. This labeling must be in the user's possession during application.

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 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
- Chemical resistant gloves Category A, such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber ≥14 mils
- Shoes plus socks

#### STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in cool, dry and well ventilated area. Do not store containers under wet conditions.

PESTICIDE DISPOSAL: Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

CONTAINER DISPOSAL: Non-refillable containers (1, 2.5, 30 & 55 gallon): Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

(non-refillable <5 gallons): 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 ¼ 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.

(non-refillable >5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows (all sizes): 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 for disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable container (250 gallon & bulk): Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from the 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 process two more times.

#### GENERAL INFORMATION

QUINCLORAC 4L SWF herbicide is intended for use in fallow systems, grass grown for seed, preplant wheat, preplant and in-crop sorghum and non-crop areas. QUINCLORAC 4L SWF is formulated as a aqueous flowable designed for dilution with water and spraying in common agricultural spray equipment. When used as directed, QUINCLORAC 4L SWF will provide suppression or control of weed species listed in Table 1.

Table 1. Target Weeds

Weeds Controlled		Weeds Suppresse	ed*
Annual Grasses		Annual Broadleave	es
Barnyard Grass		Kochia	_
Crabgrass	,large	Lambsquarters	,common
Foxtail	,giant	Ragweed	,common
	,green		,giant
	,yellow	Sunflower	,wild
Signalgrass	,broadleaf	Thistle <sup>3</sup>	,Russian
		Velvetleaf	

Weeds Controlled		Weeds Suppressed*		
Annual Broadleaves		Perennial Broadleaves		
Bedstraw	,catchweed (cleavers)	Dandelion Sowthistle <sup>3</sup>	,perennial	
Clovers	,	Spurge <sup>2</sup>	leafy	
Lettace Morningglory spp.	,prickly	Thistle <sup>3</sup>	,Canada	
Flax	,volunteer			
Perennial Broadleaves				
Bindweed <sup>1</sup>	,field			
	,hedge			

\*Do not exceed a total of 1.5 pints of QUINCLORAC 4L SWF per acre per calendar year. Apply QUINCLORAC 4L SWF at yellow bract (pre-bloom) or in the fall prior to the first killing frost. For best performance on this species, tank mix 0.75 pints per acre of QUINCLORAC 4L SWF with 4 - 6 ounces per acre of Distinct herbicide.

For improved control, add a tank mix partner that is active on listed species.

<sup>1</sup> Refer to the section entitled "Field and Hedge Bindweed Directions" for use directions.

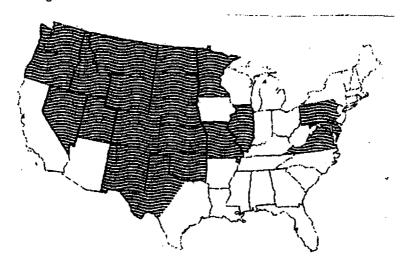
<sup>3</sup> Use 0.75 pints of QUINCLORAC 4L SWF per acre for suppression and annual growth control, but do not exceed a total of 1.5 pints of QUINCLORAC 4L SWF per acre per calendar year. Apply QUINCLORAC 4L SWF at rosette stage or bud stage. Avoid application when seed stalk is bolting. For best performance on this species, tank mix 0.75 pints per acre of QUINCLORAC 4L SWF with 4-6 ounces per acre of Distinct herbicide.

#### FIELD AND HEDGE BINDWEED

#### **Control Directions**

For most effective bindweed control, apply QUINCLORAC 4L SWF herbicide in the fall just prior to the first killing frost. Bindweed plants should be actively growing and at least 4 inches long. If tillage is a part of local post-harvest practices, allow a minimum of 30 days for bindweed plants to re-grow after tillage prior to application. For best long term bindweed control, make yearly applications of QUINCLORAC 4L SWF at 0.5-0.75 pints per acre in the Fall. Use the higher rate for dense populations or large plants.

Figure 1. Application Region for QUINCLORAC 4L SWF



QUINCLORAC 4L SWF may be used in the following counties of Texas: Archer, Armstrong, Bailey, Baylor, Borden, Briscoe, Brown, Callahan, Carson, Castro, Chlidress, Clay, Cochran, Coke, Coleman, Collin, Collingsworth, Concho, Cooke, Cottle, Crosby, Dallam, Dawson, Deaf Smith, Denton, Dickens, Donley, Fisher, Floyd, Foard, Garza, Glasscock, Gray, Grayson, Hale, Hall, Hansford, Hardeman, Hartley, Haskell, Hemphill, Hockley, Hutchinson, Jack, Jones, Kent, King, Know, Lamb, Lipscomb, Lubbock, Lynn, McCulloch, Montague, Moore, Motley, Nolan, Chiltree, Oldham, Parmer, Potter, Randall, Roberts, Runnels, Schackleford, Scurry, Sherman, Sterling, Stonewall, Swisher, Taylor, Terry, Throckmorton, Wheeler, Wichita, Wilbarger, Wise, Yoakum, and Young.

<sup>&</sup>lt;sup>2</sup> Use 0.75 – 1.5 pints of QUINCLORAC 4L SWF per acre in non-crop areas for suppression and annual growth control, but do not exceed a total of 1.5 pints of QUINCLORAC 4L SWF per acre per calendar year. Apply QUINCLORAC 4L SWF at yellow bract (pre-bloom) or in the fall prior to the first killing frost. For best performance on this species, tank mix 0.75 pints per acre of QUINCLORAC 4L SWF with 4-6 pints per acre of Distinct herbicide.

Be sure to obtain and follow all Texas state requirements for QUINCLORAC 4L SWF uses.

Mode of Action

QUINCLORAC 4L SWF is a systemic herbicide with plant uptake occurring through both the foliage and roots. Resultant herbicide symptoms on susceptible plants include twisting, stunting, reddening and chlorosis. For annual plants, symptoms may take up to two weeks after application to develop with death occurring in about three weeks. For perennial weeds, symptoms may not be evident for several weeks after application and full effect may not be evident for 3 to 6 months.

## Coverage

When making postemergence applications, weeds must be thoroughly covered with spray because foliar uptake of QUINCLORAC 4L SWF by the target weed is important for optimum control. Large leaf canopies shelter smaller weeds and can prevent adequate spray coverage.

Cleaning Spray Equipment

Clean spray equipment thoroughly using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions before and after applying this product.

#### APPLICATION INSTRUCTIONS

Based on the uses described in this label, QUINCLORAC 4L SWF may be applied by ground application equipment only. QUINCLORAC 4L SWF may be applied using aerial application equipment ONLY when permitted by approved supplemental labeling for this product. The supplemental labeling must be in the possession of the user at the time of aerial application.

QUINCLORAC 4L SWF may be applied as either a broadcast or spot spray application. Applications must me made to actively growing weeds.

For most broadleaf weeds, the most effective control will result from applying QUINCLORAC 4L SWF early, when weeds are small. Delaying application permits weeds to exceed the maximum size and may prevent adequate control. In irrigated areas, it may be necessary to irrigate before treatment to ensure active weed growth.

Ground Application (Broadcast)

Water Volume: Use 5-30 gallons of water per broadcast acre. When weed foliage is dense, higher spray volumes may be required.

Spray Pressure: Use a maximum of 30 psi (measured at the boom, not at the pump or in the line).

Application Equipment: Use only nozzles that will produce uniform spray patterns and thorough coverage, spaced up to 20 inches apart. Select nozzles designed to produce minimal amounts of fine spray particles. Do not use controlled droplet applicator (CDA) nozzles as erratic coverage can cause inconsistent weed control. Do not use selective application equipment such as recirculating sprayers or wiper applicators. Drift reduction nozzles such as Delavan® Raindrop Drift Reduction Flat Spray Tip, RF Tips, XR Tee Jet<sup>TM</sup> Extended range Flat Spray Tips, or other brands of comparable capabilities are recommended.

## SPRAY ADDITIVES

To achieve consistent weed control, the use of spray additive(s) with QUINCLORAC 4L SWF is required. The recommended spray additive with QUINCLORAC 4L SWF is methylated seed oil. The use of crop oil concentrate with QUINCLORAC 4L SWF is also permitted. A nitrogen fertilizer source (AMS or UAN) can

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be added to enhance efficacy, but cannot be used in place of methylated seed oil or crop oil concentrate. Refer to Table 2. Spray Additive Rate Per Acre for spray additive rates.

Table 2. Spray Additive Rate per Acre

SPRAY ADDITIVE	GROUND APPLICATION
Methylated Seed Oil	1.0 – 2.0 pints <sup>2</sup>
Crop Oil Concentrate	2.0 pints
AMS <sup>1</sup>	2.5 pounds
UAN Solution <sup>1</sup>	0.5 – 1 gallon
Optional	<u> </u>
<sup>2</sup> For best grass control, use at least 1.5 pint	s/acre of Methylated seed oil.

#### METHYLATED SEED OIL OR CROP OIL CONCENTRATE:

A methylated seed oil or crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all of the following criteria:

- be non-phytotoxic,
- · contain only EPA-exempt ingredients,
- · provide good mixing quality in the jar test, and
- be successful in local experience.

The exact composition of suitable products will vary; however, vegetable and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils.

For additional information, see Compatibility Test for Mix Components.

For bindweed control in Oklahoma, New Mexico and the designated counties of Texas, the use of methylated seed oil plus AMS is mandatory with QUINCLORAC 4L SWF herbicide when it is applied alone.

## NITROGEN FERTILIZER SOURCE:

- Urea ammonium nitrate (UAN): Commonly referred to as 28%, 30%, or 32% nitrogen solution. Do not use brass or aluminum nozzles when spraying UAN.
- Ammonium sulfate (AMS): AMS may be substituted for UAN. Use high-quality AMS (spray grade) to avoid plugging of nozzles. Other sources of nitrogen are not as effective as those mentioned, Albaugh does not recommend applying AMS if applied in less than 10 gallons per acre because of potential problems with precipitation in reduced volumes. Use AMS only if it has been demonstrated to be successful in local experience. Because most nitrogen solutions are mildly corrosive to galvanized, mild steel, and brass spray equipment, rinse the entire spray system with water soon after use. Use high-quality AMS to avoid plugging spray nozzles. The AMS must be readily soluble in water and contain no insoluble materials. Local sources of high-quality, fine, feed-grade AMS may be better than fertilizer grade. Low-quality AMS may contain material that will not readily dissolve, which could result in nozzle tip plugging. To determine AMS quality, perform a jar test adding 1/3 cup of ammonium sulfate to 1 gallon of water and agitate for 1 minute. If any un-dissolved sediment is observed, pre-dissolve the AMS in water and filter before adding it to the spray tank. If the AMS is added directly to the spray tank, add slowly while agitating. Adding the mix too quickly may clog outlet lines.

Nonionic Surfactant:

Alternatively, an 80% active nonionic spray surfactant may only be used when QUINCLORAC 4L SWF is tank mixed with other products that restrict the use of oil additives. However, the use of nonionic surfactant may result in reduced weed control with QUINCLORAC 4L SWF. The standard label recommendation for nonionic surfactant is 1 quart per 100 gallons of water (0.25% vol./vol.). Applications with nonionic surfactant require the addition of a nitrogen fertilizer source.

#### GENERAL TANK MIXING INFORMATION

Read and follow the applicable Restrictions and Limitations and Directions For Use on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

## Tank Mix Partners/Components

Use the following tank mixes to achieve control of the weeds listed as suppressed in Table 1. The following herbicides may be tank mixed with QUINCLORAC 4L SWF herbicide according to the specific tank mixing instructions in this label and respective product labels. For all recommended tank mixes, use a rate of 0.5 - 0.75 pints per acre of QUINCLORAC 4L SWF.

Albaugh does not recommend using tank mixes other than those listed on Albaugh labeling. Physical incompatibility, reduced weed control, or crop injury may result from mixing QUINCLORAC 4L SWF with other pesticides, additives, or fertilizers. Local agricultural authorities may be a source of information when using other than Albaugh recommended tank mixes.

- 2.4-D
- Atrazine
- Buctril® (bromoxynil)
- Brox 2E (bromoxynil)
- Buctril®/Atrazine (bromoxynil + atrazine)
- Brox AT (bromoxynil + atrazine)
- Clarity® (dicamba)
- Dicamba DMA (dicamba)
- Cyclone® (paraquat)
  Distinct® (diflufenzopyr + dicamba)
- Fallowmaster® (glyphosate + dicamba)
- Fallow Star® (glyphosate + dicamba)

- Frontier® (dimethenamid)
- Gly Star Plus (glyphosate)
- Guardsman® Max (dimethenamid-P+atrazine)
- Landmaster® (glyphosate + 2,4-D) Marksman® ( dicamba + atrazine)
- Outlook® (dimethenamid-P)
- Peak® (prosulfuron)
- Range Star (dicamba + 2,4-D)
- Roundup® RT (glyphosate) Roundup® Ultra (glyphosate)
- Weedmaster® (dicamba + 2,4-D)

#### Compatibility Test for Mix Components

Add components in the following sequence using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre.

- 1. Water: For 20 gallons per acre spray volume, use 3-1/3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Use only water from the intended source at the source temperature.
- 2. Products in PVA bags: Cut an opening in the water-soluble PVA bag just large enough to use a teaspoon for measuring purposes. Use the opened water-soluble PVA bag first when preparing spray solution. Cap the jar and invert 10 cycles.
- 3. Water-dispersible products including QUINCLORAC 4L SWF, such as dry flowables, wettable powders, suspension concentrates, or suspo-emulsions: For the 0.5 pint rate, use 1 teaspoon. For the 0.75 pint rate, use 1.5 teaspoons. Cap the jar and invert 10 cycles.
- 4. Water-soluble products: Cap the jar and invert 10 cycles.
- 5. Emulsifiable concentrates: (methylated seed oil or crop oil concentrate when applicable ). Cap the jar and invert 10 cycles.
- 6. Water-soluble additives (AMS or UAN when applicable): Cap the jar and invert 10 cycles.

- 7. Let the solution stand for 15 minutes.
- 8. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. Do not use any spray solution that could clog spray nozzles.

## Mixing Order

- 1. Water. Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
- 2. Agitation. Maintain constant agitation throughout mixing and application.
- 3. Inductor. If an inductor is used, rinse it thoroughly after each component has been added.
- 4. Products in PVA bags: Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- 5. Water-dispersible products (including QUINCLORAC 4L SWF herbicide), dry flowables, wettable powders, suspension concentrates, or suspo-emulsions.
- 6. Water-soluble products.
- 7. Emulsifiable concentrates (such as oil concentrate when applicable).
- 8. Water-soluble additives (such as AMS or UAN when applicable).
- 9. Remaining quantity of water, Maintain constant agitation during application.

## **GENERAL RESTRICTIONS AND LIMITATIONS**

- Maximum seasonal use rate: Do not apply more than a total of 1.5 pints of QUINCLORAC 4L SWF<sup>®</sup> herbicide per acre, per calendar year.
- Restricted Entry Interval (REI): 12 hours.
- Crop Rotation Restrictions: In case of crop failure, only Spring or Winter wheat or grain sorghum may
  be immediately replanted. Do not plant any other crop other than Spring or Winter wheat or grain
  sorghum for 309 days (10 months) following application. For alfalfa, clover, dry beans, flax, peas,
  lentils, safflower, Solanaceous crops listed below, and sugarbeets, do not replant for 24 months and
  conduct a bioassay prior to planting any of these crops.
- Do not apply to weeds or grasses under stress due to lack of moisture, herbicide injury, mechanical injury or cold temperatures, as unsatisfactory control may result.
- Do not apply to crops subjected to stress conditions such as hail damage, flooding, drought, injury from other herbicides, or widely fluctuating temperatures, as crop injury may result.
- Do not use selective application equipment such as recirculating sprayers, wiper applicators, or shielded applicators.
- Rainfast period: QUINCLORAC 4L SWF is rainfast 6 hours after application.
- Wind Speed for Ground Applications; Do not apply QUINCLORAC 4L SWF when wind is blowing more than 10 mph.
- Do not apply QUINCLORAC 4L SWF using aerial equipment unless permitted supplemental labeling.
- Do not apply through any type of irrigation equipment.

## DRIFT:

Do not allow QUINCLORAC 4L SWF to drift onto other desirable plants, especially sensitive crops belonging to the following plant families:

- 1. Solanaceae [tomato, potato, tobacco, eggplant, peppers (Capsicum), among others]
- 2. Umbelliferae (celery, parsley, carrots, among others)
- 3. Leguminosae (alfalfa, green bean, among others)
- 4. Convolvulaceae (sweet potato, among others)
- 5. Chenopodicaceae (spinach, sugar beet, among others)
- 6. Malvaceae (okra, among others)
- 7. Cucurbitaceae (watermelon, cantaloupe, squash, pumpkin, among others)

- Compositae (lettuce, sunflowers, among others) 8.
- 9. Linaceae (flax)
- Do not allow spray containing QUINCLORAC 4L SWF to drift onto areas where tomatoes are to be planted, have been planted, or onto emerged tomatoes, as severe injury will occur.
- Do not use QUINCLORAC 4L SWF in tank mixes not specified on this label or Albaugh technical
- Do not premix QUINCLORAC 4L SWF with fungicides, herbicides, insecticides, additives, or fertilizers as contamination of mixing equipment and movement of QUINCLORAC 4L SWF to off-site mixing areas can occur.

## **CROP SPECIFIC INFORMATION**

#### **GRASS GROWN FOR SEED**

For use in the following grasses grown for seed:

Cool Season Grasses:

Bromegrass; smooth, meadow, smooth X meadow cross European Dunegrass Fescue; fine, tall Junegrass Kentucky Bluegrass Quackgrass Needlegrass; green Orchardgrass Ryegrass; annual, indian, perennial Wheatgrass; bluebunch, crested, fairway, fairway X crested cross, intermediate, pubescent, siberian,

slender, tall, thickspike, western, bluebunch X guack cross

Wildrye; altai, basin, beardless, dariurian, mammoth, Russian

Warm Season Grasses:

Bermudagrass Bluestem; big, little, sand Grama: blue, side-oats Sandreed: prairie **Switchgrass** 

Apply QUINCLORAC 4L SWF herbicide at 0.5 pints per acre for control of annual grasses and broadleaf weeds (see Table 1). Apply QUINCLORAC 4L SWF for bindweed control after grass seed harvest and hay removal but before the first killing frost. Refer to the section entitled "Field and Hedge Bindweed Directions" for use directions,

## Tank Mixing Information:

Other registered products may be tank mixed with QUINCLORAC 4L SWF, Read and follow the applicable Restrictions and Limitations and Directions For Use on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

FALLOW SYSTEMS OR PRE-PLANT WHEAT OR PRE-PLANT SORGHUM DO NOT use pre-plant wheat in the following states: ID, MT, NV, OR, UT, WA, or WY

QUINCLORAC 4L SWF can be applied in fallow areas or pre-plant wheat (do not apply in in ID, MT, NV, OR, UT, WA or WY) or pre-plant grain sorghum at 0.5 pints per acre for control of annual grasses and broadleaf weeds (see Table 1). For bindweed control with QUINCLORAC 4L SWF, refer to the section entitled "Field and Hedge Bindweed Directions" for use directions. When QUINCLORAC 4L SWF is applied as a Pre-plant treatment in wheat, plant wheat at least 1" deep.

Shallow planting (<1" deep) may result in possible crop injury when wheat is subjected to drought or other stress conditions.

#### Fallow Tank Mixes:

Other registered products may be tank mixed with QUINCLORAC 4L SWF. Read and follow the applicable Restrictions and Limitations and Directions For Use on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

- 2.4-D
- Clarity® (dicamba)
- Dicamba DMA® (dicamba)
- Distinct® (diflufenzopyr + dicamba)
- Fallow Star® (glyphosate + dicamba)
- Landmaster® (glyphosate + 2,4-D) Roundup RT® (glyphosate)
- Gly Star Plus (glyphosate)
- Roundup Ultra® (glyphosate)

#### IN-CROP SORGHUM

Apply QUINCLORAC 4L SWF to grain sorghum at 0.5 - 0.75 pints per acre from preemergence to postemergence (to 12 inch tall sorghum) for control of annual grasses and broadleaf weeds. For best annual grass control, QUINCLORAC 4L SWF should be applied at 0.5 - 0.75 pints per acre in a tank mix with atrazine at 0.5-1.0 pound a.i. per acre when weeds are less than 2" tall. Do not use liquid fertilizer as a carrier for postemergence applications of QUINCLORAC 4L SWF to grain sorghum.

Tabel 3 Tank Mix Use Rate Per Acre with Quinclorac 4L SWF

Herbicide	Fallow and	Preplant	Post-emerge
Tank Mix	Preplant	Sorghum	Sorghum
Partner	Wheat		
2,4-D	0.375 - 1.0 lb ai	0.375 - 1.0 lb ai	0.125 - 0.5 lb ai
Atrazine	_	0.5 - 1.0 lb ai	0.5 - 1.0 lb ai
Clarity <sup>®</sup>	4- 16 oz.	4- 16 oz.	8 oz.
Fallow Star <sup>®</sup>	22 - 44 oz.	22 - 44 oz.	_
Landmaster <sup>®</sup>	32 - 54 oz.	32 - 54 oz.	_
Peak <sup>®</sup>	<del>-</del>	<del></del>	0.25 oz.
Roundup <sup>®</sup> Ultra and Gly Star Plus	12 - 32 oz.	12 - 32 oz.	_
Buctril® and Brox 2E		_	16 oz.
Buctril®/Atrazine and Brox –AT			32 oz.
Guardsman Max <sup>®</sup>	<del>-</del>	<del>-</del>	40 - 64 oz.

In Oklahoma, New Mexico, and in the designated counties in Texas, apply only 0.75 pints of QUINCLORAC 4L SWF per acre to in-crop sorghum.

## NONCROP AREAS (ROADSIDES, FENCELINES AND RIGHTS-OF-WAY)

QUINCLORAC 4L SWF may be applied to non-crop areas such as fence lines, roadsides, highway medians, utilities, railroad and pipeline rights-of-way. QUINCLORAC 4L SWF may be applied to non-

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cropland areas for the control of certain weeds in the Noxious Weed Control Programs, Districts or Areas including broadcast or spot treatments. Use 0.5 - 0.75 pints of QUINCLORAC 4L SWF per acre for control of annual weeds, or 0.75 – 1.5 pints per acre for other perennial weeds (see Table I), but do not exceed a total of 1.5 pints of QUINCLORAC 4L SWF per acre per calendar year. For bindweed control with QUINCLORAC 4L SWF, refer to the section entitled "Field and Hedge Bindweed Directions" for use directions.

#### Non-Crop Tank Mixes:

Other registered products may be tank mixed with QUINCLORAC 4L SWF. Read and follow the applicable Restrictions and Limitations and Directions For Use on products involved in tank mixing. The most restrictive labeling applies to tank mixes.

- 2.4-D
- Clarity® (dicamba)
- Dicamba DMA (dicamba)
- Distinct® (diflufenzopyr + dicamba)
- Roundup® RT (glyphosate)
- Roundup® Ultra (glyphosate)
- Gly Star Plus (glyphosate)

## Crop-Specific Restrictions and Limitations

- Do not allow livestock to graze in treated areas.
- Do not harvest hay from treated areas within 309 days after application.
- Do not feed treated grasses, forage, hay, silage, straw, seed nor seed screenings to livestock.
- Do not apply to water or to areas where surface water is present.
- Do not apply to irrigation ditches or areas that act as a channel for water entering cropland.

#### Crops:

This product can be used on the following crops:

- Fallow Systems
- Grass Grown for Seed
- Grain Sorghum
- Wheat (pre-plant)

Look inside for complete Restrictions and Limitations and Application Instructions.

WEEDS LISTED IN THIS LABEL			
Common Name	Scientific Name		
Barnyardgrass	Echinochloa crus-galli		
Bedstraw/cleavers	Galium aparine		
Bindweed, Field hedge	Convolvulus arvensis Calystegia sepium		
Broadleaf signalgrass	Brachiaria platyphylla		

WEEDS LISTED IN THIS LABEL				
Common Name	Scientific Name			
Clover,				
crimson	Trifolium incarnatum			
red	Trifolium pratense			
white	Trifolium repens			
Crabgrass, large	Digitaria sanguinalis			
Dandelion	Taraxacum officinale			
Foxtail,				
giant	Setaria faberi			
green	Setatia glauca			
yellow	Setaria viridis			
Kochia	Kochia scoparia			
Lambsquarters, common	Chenopodium album			
Lettuce, prickly	Lactuca seriola			
Morningglory	Ipormea spp.			
Ragweed,				
common	Ambrosia artemisiilfolia			
giant	Ambrosia trifida			
Signalgrass, broadleaf	Brachiaria platyphylla			
Sowthistle	Sonchus oleraceus			
Spurge	Euphorbia spp.			
Sunflower, wild	Helianthus annuus			
Thistle,				
Canada	Cirsium arvense			
Russian	Salsola iberica			
Velvetleaf	Abutilon theophrasti			
Volunteer Flax	Linum sp.			

## CONDITIONS OF SALE AND WARRANTY

The Directions For Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other

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unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of Albaugh, Inc. or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

Albaugh, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions For Use, subject to the inherent risks, referred to above.

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