70506-40



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

11/24/2010

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

United Phosphorus, Inc. Rebecca A. Clemmer 630 Freedom Business Center Suite 402 King of Prussia, PA 19406

NOV 24 2010

Subject:

Label Notification for Pesticide Registration Notice 2007-4 Surflan 75WSP EPA Reg. No. 70506-40 Application Dated: August 18, 2010

Dear Ms. Clemmer,

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 2007-4 for Surflan 75WSP (EPA Reg. No. 70506-40) dated August 18, 2010. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 2007-4 and finds that the action requested falls within the scope of PRN 2007-4.

We have also reviewed the updates to company and emergency contact information and updated warranty and find that these actions fall within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, please call me directly at (703) 305-1243.

Sincerely. Kathryn V. Montague, Product Manager 23

Herbicide Branch Registration Division (7505P) Office of Pesticide Programs

	C					C		
Please read instructions on rever	se before completing form			Fo	rm A	pproved, OMB	No. 2070-00)60, Approval expires 5-31-98
		ited States				Registrati	the second s	OPP Identifier Number
	Environmenta	I Protection	Agency			Amendme	ent	
	Washin	gton, DC 2046	0		X	Other		and the state of the state
		plication fo		de - Sectio	n I		200	2.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1
1. Company/Product Number	r	a second		PA Product M	anag	er	3. Propo	osed Classification
70506-40 4. Company/Product (Name)			Mont PM #					one Restricted
United Phosphorus, Inc/Surfla	an 75WSP		23					
5. Name and Address of App Jnited Phosphorus, Inc. 530 Freedom Business Cente King of Prussia, PA 19406	전망 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전		(b)(i), to:					FRA Section 3(c)(3) position and labeling
Check if this is a new ad	ddress		Produ	uct Name		the second		
		S	ection - II					
Amendment – Explain b	pelow				d lab	els in respons	se to	
	A Press in	and the second		Agency lett				
Resubmission in respon	ise to Agency letter dated	I		"Me Too" A	pplica	ation		
X Notification – Explain be	elow			Other – Exp	lain	below		
he labeling or the CSF for thi understand that if the amende enforcement action and penal	ed label is not consistent	with the section nd 14 of FIFRA.	ns above, thi					
I. Material This Product Will	be Packaged in:				100	1.22 8 3.38	Carley I	
Child-Resistant Packaging	Unit Packaging		Water Solu	uble Packagir	g	18-12		e of Container etal
			No					astic
and a state of the state of the		T.N.	1. 1. 1. 1. 1. 1.	Section Section	1.0	100 10 1. M		ass
Certification must be submitted	If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package w	vgt		o. per ontainer		aper ther (Specify)
3. Location of Net Contents I x Label	nformation Container	4. Size(s) F 35 x 1.3 lb v			14	x	On Label	bel directions
. Manner in Which Label is A	Affixed to Product	Lithog	ranh	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	-	Other	on Label a	ccompanying product
	Anixed to Product	Lithog x Paper	glued					
		Stenci	led	and a starting		- States		
	ALL		action IV		100			AND ALL THE OWNER
. Contact Person (Complete	e items directly below for	S	ection IV		d, if n	ecessary to	process th	nis application.)
Name	e items directly below for	S identification of Title	individual to	be contacted	d, if n	Teleph	one No. (nis application.) Include Area Code)
Name Rebecca A. Clemmer Certify that the statements I h	Co nave made on this form an	S identification of Title Regula ertification d all attachmen	individual to atory Manage ts thereto are	o be contacted er e true, accura	te and	Teleph 610-49	one No. (1-2828	
Vame Rebecca A. Clemmer certify that the statements I h acknowledge that any knowin	Co nave made on this form an	S identification of Title Regula ertification d all attachmen atement may be	individual to atory Manage ts thereto are punishable l	o be contacted er e true, accura	te and	Teleph 610-49	one No. (1-2828	Include Area Code) . Date Application Received
Name Rebecca A. Clemmer I certify that the statements I h I acknowledge that any knowin both under applicable law 2. Signature	Co nave made on this form an ngly false or misleading sta	S identification of Title Regula ertification d all attachmen atement may be 3. Title	individual to atory Manage ts thereto are punishable l	o be contacted er e true, accura by fine or imp	te and	Teleph 610-49	one No. (1-2828	Include Area Code) Date Application Received (Stamped)
Name Rebecca A. Clemmer I certify that the statements I h I acknowledge that any knowin both under applicable law 2. Signature R. A. CLEM	Co nave made on this form an ngly false or misleading sta	S identification of Title Regula ertification d all attachmen atement may be 3. Title Regula	individual to atory Manage ts thereto are punishable l a atory Manage	o be contacted er e true, accura by fine or imp	te and	Teleph 610-49	one No. (1-2828	Include Area Code) . Date Application Received
1. Contact Person (Complete Name Rebecca A. Clemmer I certify that the statements I h I acknowledge that any knowin both under applicable law 2. Signature Rebecca A. Clemme 4. Typed Name Rebecca A. Clemmer	Co nave made on this form an ngly false or misleading sta	S identification of Title Regula ertification d all attachmen atement may be 3. Title Regula 5. Dat	individual to atory Manage ts thereto are punishable l a atory Manage	o be contacted er e true, accura by fine or imp	te and	Teleph 610-49	one No. (1-2828	Include Area Code) Date Application Received (Stamped)



United Phosphorus, Inc.

630 Freedom Business Center Suite 402 King of Prussia, PA 19406 (610) 491-2828 (phone) (610) 491-2810 (fax) Rebecca A. Clemmer Regulatory Manager

August 19, 2010

Kathryn Montague (PM 23) Document Processing Desk (NOTIF) Office of Pesticide Programs (7504P) U.S. Environmental Protection Agency Room S-4900, One Potomac Yard 2777 S. Crystal Drive Arlington, VA 22202

Re: Notification of Container Disposal Changes per PRN 2007-4

Dear Ms. Montague:

United Phosphorus, Inc. is providing Notification of the following changes in the labels for products listed below: container disposal wording per PRN 2007-4; updates to company and emergency contact information and updated warranty per PRN 98-10.

Products:

Surflan 75WSP – EPA Reg. No. 70506-40 Surflan 75W – EPA Reg. No. 70506-42 Surflan 0.25 A.S. – EPA Reg. No. 70506-47 Surflan 75W Manufacturing Use Product – EPA Reg. No. 70506-54

In support, for each product you will find:

- copy of the label marked to show changes
- EPA form 8570-1

Please contact me if you have any questions.

Very truly yours,

a. Clemmer

Rebecca A. Clemmer rebecca.clemmer@uniphos.com

Surflan[®] 75WSP

A preemergence surface-applied herbicide for control of most annual grasses and certain broadleaf weeds.

Active Ingredient:	
oryzalin: 3,5-dinitro-	
N ⁴ , N ⁴ -dipropylsulfanilamide	75%
	25%
Total	100%

Contains 1.0 pound active ingredient per 1.3 pound water-soluble packet.

This resealable package contains Surflan 75WSP herbicide in water-soluble packets. Do not remove water-soluble packet except for immediate use.

Keep Out of Reach of Children CAUTION PRECAUCION

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

First Aid

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

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

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency medical assistance, call the <u>National Pesticide InformationRocky Mountain</u> <u>Poison Control</u> Center at 1-800-858-7378866-673-6671.

For chemical emergency: spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300.

Notice: Read the entire label. Use only according to label directions. **Before** buying or using this product, read the Conditions of Sale and Limitation of Warranty and Liability inside the label booklet.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 70506-40

EPA Est. No.____



United Phosphorus, Inc.
423 Riverview Plaza630 Freedom Business Center
Trenton, NJ 08611King of Prussia, PA 19406
1-800-247-1557438-6071 • www.upi-usa.com

Herbicide

Net Weight 45.5 lb (Contains 35 x 1.3 lb water soluble packets) NOTIFICATION NOV 2 4 2010

Table of Contents	Page	
Precautionary Statements		5.5
Directions for Use		
Handling Precautions for Water Soluble Packets	3	
Storage and Disposal	3	
General Information		
General Use Precautions	4	
Soil Preparation		
Activation and Cultivation	4	
Mixing Directions		
Testing for Compatibility in Liquid Fertilizers	6	
Application Methods		
Ground Broadcast Application	7	
Band Application		
Weeds and Grasses Controlled in Fruit and Nut Crops		
and Vineyards	8	
Approved Crops:		
Fruit and Nut Crops and Vineyards (Non-bearing and bearing)		
Surflan 75WSP - Alone	10	
Broadcast Application Rates		
Surflan 75WSP - Tank Mix Recommendations	11	
Surflan 75WSP/Goal	11	
Surflan 75WSP/Goal/Gramoxone		
Surflan 75WSP/Gramoxone	11	
Surflan 75WSP/Princep (simazine)	11	
Surflan 75WSP/glyphosate	11	
Surflan 75WSP/Solicam	11	
Surflan 75WSP - Tank Mix Reference Table	12	
Conditions of Sale & Limitation of Warranty and Liability	13	

LECEL

eccc

Precautionary Statements

Hazards to Humans and Domestic Animals Keep Out of Reach of Children CAUTION

Causes Moderate Eye Irritation • Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Avoid contact with skin, eyes, or clothing.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant 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.

Engineering Controls Statements

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (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 pesticide is toxic to fish. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. 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.

Handling Precautions for Water Soluble Packets

Do not remove packet from foil overpack except for immediate use. Do not allow packet to come in contact with water prior to use. Do not handle with wet hands. Carefully reseal package after use and protect unopened packets from moisture.

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

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (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 24 hours. **Exception:** If the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Workers may enter treated areas without required PPE during the reentry interval following 1/2 to 1 inch of rainfall or irrigation, otherwise, 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

Shoes plus socks

STORAGE AND DISPOSAL

Pesticide Storage: Store in original container only. In case of leak or spill, contain material with absorbent material and dispose as waste.

Pesticide Disposal: Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Container Disposal: Nonrefillable container. Do not refill or reuse this container. Offer for recycling if available, or Ddispose of overpack the empty outer pouch in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. the trash as long as WSP is unbroken.

General Information

Surflan 75WSP herbicide is a preemergence, surface applied herbicide for the control of most annual grasses and certain broadleaf weeds. Surflan 75WSP controls susceptible annual weeds by disrupting plant growth processes during germination. Surflan 75WSP may be applied in liquid sprays of water or liquid fertilizer (See special mixing instruction if used with liquid fertilizer). Surflan 75WSP may be tank mixed with other herbicides to control existing vegetation or improve the spectrum of weeds controlled. Surflan 75WSP alone does not control established weeds.

Formatted: Font: Not Bold Formatted: Font: Not Bold

General Use Precautions and Restrictions

Do not graze or feed forage from treated fields or orchards to livestock.

Poor weed control may result if directions are not carefully followed.

Do not over-apply Surflan 75WSP. Over-application may result in crop injury or soil residue.

Do not plant any root crop for 12 months following a Surflan 75WSP application.

Do not use Surflan 75WSP on soils containing more than 5% organic matter. Apply Surflan 75WSP directly to the soil surface in orchards or vineyards. For orchard crops, including citrus, pome fruits, stone fruits, and tree nuts, apply product only as a strip treatment in the tree rows; do not apply to row middles or drive rows.

Carefully follow label directions to avoid poor weed control or crop injury.

Chemigation: See instructions for chemigation in "Application Methods".

Do not aerially apply this product.

Soil Preparation

Optimum herbicidal activity occurs when Surflan 75WSP is applied to the soil surface. Prior to application, existing unwanted vegetation should be destroyed by tillage or use of contact or translocated herbicides. Crop or weed residues, prunings and trash should be thoroughly mixed into the soil by tillage equipment or removed before treatment. Soil should be in good tilth and free of clods at the time of application.

Activation and Cultivation

A single 1/2 to 1-inch rainfall or sprinkler irrigation is required to activate Surflan 75WSP and move the herbicide into the zone of weed germination. Rainfall or irrigation of 1 inch or more is needed to activate Surflan 75WSP on fine-textured, high organic matter soils. If weeds begin to emerge, a shallow cultivation to a depth of 1 to 2 inches will destroy existing weeds and place Surflan 75WSP in the zone of weed seed germination.

Mixing Directions

Surflan 75WSP - Alone

Surflan 75WSP may be applied in water or most liquid fertilizer materials. Prior to mixing Surflan 75WSP in liquid fertilizer, refer to "Testing for Compatibility in Liquid Fertilizers" for test procedures to determine compatibility with the fertilizer product to be used. The combination of Surflan 75WSP with solution and suspension-type fertilizers provides annual weed control equal to Surflan 75WSP applied in water. Individual state regulations relating to liquid fertilizer mixing, registration, labeling and application are the responsibility of the individual and/or company offering the fertilizer and chemical mixture for sale.

Start with a clean spray tank. Fill the sprayer to 1/3 to 1/2 of the required spray volume. Start agitation. Add the required number of water-soluble packets to the spray tank. Allow time for complete mixing of Surflan 75WSP after packets have disintegrated. Continue agitation and fill spray tank to required spray volume. Maintain continuous agitation from mixing through application.

Special Instruction: Do not add Surflan 75WSP water-soluble packets directly to liquid fertilizers. Surflan 75WSP in water-soluble packets should first be premixed with water (See instruction for premixing or slurrying below). Add premixed Surflan 75WSP to the spray tank through a 20-35 mesh-wetting screen to insure good initial dispersion.

Precaution: Do not allow the mixture to siphon back into the water source.

Surflan 75WSP - Tank Mix Combinations

Surflan 75WSP may be tank mixed with other products and applied with water or most liquid fertilizer materials. Prior to tank mixing Surflan 75WSP with other herbicides, mix the products together in correct proportions in a small container of water. After mixing, let stand for 5 minutes and check for compatibility. If the combination remains mixed or can be resuspended easily, the mixture is compatible.

Tank Mixing in Liquid Fertilizer: Prior to mixing Surflan 75WSP with other products in liquid fertilizer, refer to the tank mix product manufacturer's label to determine if application in liquid fertilizer is recommended. Also refer to "Testing for Compatibility in Liquid Fertilizers" for testing procedures to determine compatibility with the fertilizer product to be used. The combination of Surflan 75WSP with solution and suspension-type fertilizers provides annual weed control equal to Surflan 75WSP applied in water. Individual state regulations relating to liquid fertilizer mixing, registration, labeling and application are the responsibility of the individual and/or company offering the fertilizer and chemical mixture for sale. Read and follow all label instructions for each material to be added to the spray tank.

Vigorous continuous agitation is required for all tank mixes. Sparger pipe agitators generally provide the best agitation in spray tanks. To prevent foaming, keep the end of the fill pipe below the surface of the water in the spray tank during filling to prevent air from being stirred or splashed into the mixture.

Mixing Order: Fill the spray tank to 3/4 of the total spray volume required. Start agitation. Add different formulation types in the order indicated below, allowing time for complete mixing and dispersion after addition of each product. Allow extra mixing and dispersion time for dry flowable products. Allow time for complete mixing after Surflan 75WSP water-soluble packets have disintegrated. Add different formulation types in the following order: dry flowables (DF); Surflan 75WSP and or other wettable powders (WP); flowables (F), liquids (L) or aqueous suspensions (AS); solutions (S); and emulsifiable concentrates (EC). Fill tank to final spray volume. Maintain continuous agitation during mixing, final filling and throughout application. If spraying and agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be resuspended before spraying is resumed. A sparger agitator is particularly useful for this purpose. Settled materials may be more difficult to resuspend than when originally mixed.

Premixing: When tank mixing or mixing with liquid fertilizers, initial mixing and dispersion of dry flowable or wettable powder products may be improved by premixing with water (slurrying). Surflan 75WSP in water-soluble packets should be slurried prior to mixing with liquid fertilizer materials. Where recommended for other products, follow product label instructions for each material. Adding the slurried material to the spray tank through a 20 to 35 mesh-wetting screen will help assure good initial dispersion. Line screens in the tank should be no finer than 50 mesh (100 mesh is finer than 50 mesh).

Testing for Compatibility in Liquid Fertilizers

Surflan 75WSP alone or in combination with dry flowable (DF), wettable powder (WP), aqueous suspension (AS), flowable (F), liquid (L), solution (S) or emulsifiable concentrate (EC) formulations may not combine properly with some liquid fertilizer materials. Small quantities of such mixtures should <u>always</u> be tested before full-scale mixing. Follow the testing procedure below to determine if a compatibility agent is needed or which compatibility agent works best in your liquid fertilizer plus herbicide mixture. Nine compatibility agents listed at the end of this section have been thoroughly tested. Other surfactant materials available may not be formulated for use with liquid fertilizers.

Testing Procedure

- 1. Add 1 pint of liquid fertilizer to 1-quart glass jar.
- Add 1 to 4 teaspoonfuls of DF, Surflan 75WSP, other WP formulations, AS, F, or L formulations, depending on mixing ratio required, to the liquid fertilizer. Close the jar and shake until evenly dispersed after addition of each formulation. If dry flowable or wettable powder formulations do not disperse well, it may be necessary to slurry the materials in a small amount of water before addition to the liquid fertilizer.
- 3. After dispersing the materials in step 2, add any S formulations to the jar and shake well. Finally, add EC formulations to the mixture and shake well. Observe the jar for about 10 minutes. If materials rise

Surflan 75WSP

to the surface and form a thick layer that will not redisperse when agitated, a compatibility agent is needed. If the mixture is easily redispersed with slight agitation, a compatibility agent is not required. Good agitation, however, must be provided to maintain dispersion in the spray tank from mixing through application.

4. If the need for a compatibility agent is demonstrated in step 3, the following procedure is recommended: Using a clean clear plastic or glass container, repeat step 1 above and add 1/2 teaspoon of the compatibility agent to the liquid fertilizer mixture. Shake well and then repeat steps 2 and 3.

An effective compatibility agent will cause the mixture to remain uniformly mixed with little or no separation for 1/2 hour or longer. If slight separation occurs, 2 to 3 inversions of container should be sufficient to uniformly redisperse the mixture. If layers form which will not disperse, try adding additional compatibility agent or use an alternative compatibility agent to achieve a uniform mixture.

Use a clean jar in each test. A compatible mixture will have a uniform appearance and will be relatively easy to redisperse with gentle agitation of the jar.

Compatibility Agents

The phosphate ester-type surfactants listed below are designed for use with liquid fertilizers and can be mixed at rates as low as 1 1/2 to 2 pints per ton of liquid fertilizer. They usually do not work well as compatibility agents for tank mixes in plain water. Add the compatibility agent just before adding herbicides. Read and follow label directions for the compatibility agent.

- 1. Sponto 168D (Witco Chemicals Co., Chicago, IL)
- 2. Compat (Farm Chemicals, Inc., Aberdeen, NC)
- Not for use in California.
- 3. Unite (Hopkins Ag Chemical, Madison, WI)
- T-Mulz 734-2 (Thompson-Hayward Chemical Co., Kansas City, KS) Not for use in California.
- Rigo Compatibility Agent (Rigo Company, Buckner, KY) Not for use in California.
- Amoco Spray Mate™ (Amoco Oil Co., Chicago, IL) Not for use in California
- Kem-Link (Universal Coop, Minneapolis, MN) Not for use in California
- Blendex™ (Helena Chemical Co., Cayce West, Columbia, SC) Not for use in California.
- 9. Spray-Aide™ (Miller Chemical and Fertilizer Corp., Hanover, PA)

Application Methods

Ground Broadcast Application

Apply Surflan 75WSP in a total spray volume of 20 to 40 gallons per acre (broadcast basis), using any properly calibrated low-pressure herbicide sprayer that will apply the spray uniformly. Use herbicide nozzle tips and screens no finer than 50 mesh for nozzle and in-line strainers. As the amount of spray volume per acre decreases, the importance of accurate calibration and uniform application increases. Check the sprayer daily to insure proper calibration and uniform application. Avoid boom overlaps that will increase rates above those recommended.

Band Application

For band application, use the following formula to calculate the required amount of Surflan 75WSP per acre.

Band Width (inches)

Row Width (inches)

Chemigation

Surflan 75WSP may be applied through properly equipped chemigation systems for weed control in fruit and nut orchards or vineyards. Read and follow all label instructions outlined below concerning chemigation before applying Surflan 75WSP by this method.

Chemigation Use Precautions: Make **non-dormant** chemigation applications of Surflan 75WSP only through solid set or hand move systems designed to distribute sprinkler irrigation beneath the tree canopy. Solid set systems utilizing tall risers for overhead application may be used only for **dormant** season chemigation applications. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for chemigation application to a public water system.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Sprinkler Chemigation Directions

The following directions must be followed for all recommended sprinkler irrigation systems (solid set and hand move systems):

- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.
- Surflan 75WSP should be injected continuously throughout chemigation water application period. The chemigation-metering pump should be checked periodically during application to ensure proper operation.
- 9. The injection-metering pump must be calibrated as specified by the manufacturer.
- 10. During chemigation, maintain agitation in supply tank at all times.
- 11. Surflan 75WSP may cause some staining of plastic hoses and tanks.
- 12. Apply Surflan 75WSP in 1/2 to 1 inch of sprinkler irrigation.

Chemigation System Calibration



- Assume, in this example, 35 acres are to be covered by a chemigation treatment.
- Product required, assuming an application rate of 2 water-soluble packets per acre is 70 packets of Surflan 75WSP

Pay

(35 acres X 2 packets/acre = 70 packets)

 For chemigation application, prepare a mixture containing a minimum of 2 gallons of water per watersoluble packet of Surflan 75WSP (see "Mixing Directions").

(70 packets X 2 gallons/packet = 140 gallons)

- Adjust the injection system to deliver 140 gallons during the time required to apply 1 inch of water to 35 acres.
- If the irrigation system requires 5 hours to apply 1 inch of water to 35 aces, the injection rate is 28 gallons per hour and is calculated as follows:

140 gallons ÷ 5 hours = 28 gallons per hour (0.467 gallons/min or 60 fl oz/min)

 Proper calibration requires the injection pump to be adjusted to deliver 60-fl. oz. per minute and is calculated as follows:

28 gallons/hr ÷ 60 min/hr = 0.467 gallons per min or 60 fl oz per min (0.467 gallons per min X 128 fl oz per gallon = 60 fl oz per min)

Mixing Directions

Prepare a mixture (slurry) for use in the chemigation system by adding the required amount of Surflan 75WSP to 1/2 of the required volume of water (1 gallon of water per packet of Surflan 75WSP). Start agitation and while mixing add sufficient water to bring the total injection volume to a minimum of 2 gallons of water per packet of Surflan 75WSP. Meter the mixture into the irrigation system during the entire irrigation period. Maintain agitation within the supply tank throughout the irrigation period. **Note:** Additional dilution of Surflan 75WSP may be necessary for accurate calibration of equipment not designed for low volume injection.

Weeds and Grasses Controlled in Fruit and Nut Crops, and Vineyards

Annual Grasses

Common Name	
Barley, little	
Barnyardgrass	
(Watergrass)	
Bluegrass, annual (Poa)	
Brachiaria	
(Signalgrass)	
Browntop panicum	
Crabgrass	
(Large crabgrass)	
(Smooth crabgrass)	
Crowfootgrass	
Cupgrass	
Downy brome	
Fall panicum	
(Spreading	

Scientific Name Hordeum pusillum Echinochloa crus-galli

Poa annua Brachiaria spp.

Panicum fasciculatum Digitaria spp.

Dactyloctenium aegyptium Eriochloa gracilis Bromus tectorum Panicum dichotomiflorum

Surflan 75WSP

panicgrass) Foxtails (Bottlegrass) (Bristlegrass) (Giant foxtail) (Green foxtail) (Pigeongrass) (Robust foxtail) (Yellow foxtail) Guineagrass (Narrowleaf panicum) Johnsongrass (Seedling only) Junglerice Lovegrass, Mexican Lovegrass, orcutt Oat, wild Ryegrass, annual (Italian) Sandbur, field Sprangletop, red Texas panicum (Buffalograss) (Coloradograss) Witchgrass

Annual Broadleaf Weeds

Common Name Carpetweed Chickweed Cudweed Fiddleneck, coast Florida pusley (Florida purslane) (Mexican clover) (Pusley) Henbit Knotweed, prostrate Lambsquarters Pigweeds (Carelessweed) (Prostrate pigweed) (Redroot pigweed) (Rough pigweed) (Smooth pigweed) (Spiny pigweed) (Tumble pigweed) Puncturevine Purslane, common Rockpurslane, redmaids Shepherdspurse

Setaria spp.

Panicum maximum

Sorghum halepense

Echinochloa colonum Eragrostis mexicana Eragrostis orcuttiana Avena fatua Lolium multiflorum

Cenchrus incertus Leptochloa filiformis Panicum texanum

Panicum capillare

Scientific Name Mollugo verticillata Stellaria media Gnaphalium chilense Amsinckia intermedia Richardia scabra

Lamium amplexicaule Polygonum aviculare Chenopodium album Amaranthus spp.

Tribulus terrestris Portulaca oleracea Calandrinia caulescens Capsella bursa-pastoris

Surflan 75WSP provides partial control or suppression of:

Common Name Filaree, redstem Filaree, whitestem Groundsel, common Ladysthumb Lettuce, prickly Mallow, common Milkweed, climbing Morningglory, annual Mustard, black Mustard, wild Nightshade, black Prickly sida (teaweed) Ragweed, common Ragweed, giant Rocket, London Smartweed, annual Sowthistle, annual Spurge, prostrate Spurge, spotted Velvetleaf

Scientific Name Erodium cicutarium Erodium moschatum Senecio vulgaris Polygonum persicaria Lactuca serriola Malva neglecta Sarcostemma cynanchiodes Ipomoea spp. Brassica nigra Sinapis arvensis Solanum nigrum Sida spinosa Ambrosia artemisiifolia Ambrosia trifida Sisymbrium irio Polygonum spp. Sonchus oleraceus Euphorbia humistrata Euphorbia maculata Abutilon theophrasti

Approved Crops

Fruit and Nut Crops and Vineyards (Non-bearing and Bearing)

Surflan 75WSP - Alone

Apply Surflan 75WSP to fruit and nut crops and vineyards as a preemergence treatment to control annual grasses and broadleaf weeds listed in the "General Information" section of this label.

Surflan 75WSP is approved for use on the following crops:

Almond	Grapefruit	Pear
Apple	Kiwi	Pecan
Apricot	Lemon	Pistachio
Avocado	Macadamia Nut	Plum
Cherry	Nectarine	Pomegranate
Fig	Olive	Prune
Filbert Orange	Orange	Walnut, English
Grape	Peach	

Small Fruits:

Blackberry	Currant	Gooseberry	
Blueberry	Dewberry	Loganberry	
Boysenberry	Elderberry	Raspberry	

"Do not apply Surflan 75WSP to lowbush blueberries.

Broadcast Application Rates per acre

Soil Texture	Length of Control	Surflan 75WSP (lb/acre)	Minimum Time Between Applications (months)	Total Amount Allowed Per Year (Ib/acre)
All Soil	Short Term (2 - 4 months)	2.6	2.5	16
Textures	Long Term (6 - 8 months)	5.2	2.5	16
	(8 - 12 months)	7.8	2.5	16

Chemigation Application of Surflan 75WSP

Apply Surflan 75WSP in 1/2 to 1 inch of sprinkler irrigation. Apply in at least 1 inch of sprinkler irrigation on medium to fine textured or high organic matter soils. Surflan 75WSP does not control established weeds. Surflan 75WSP must be applied prior to weed germination or immediately after existing weeds are controlled. Control existing unwanted vegetation with tillage or with a contact or translocated herbicide.

Cultivation

If weeds begin to emerge after application from below the zone of herbicidal activity, a shallow cultivation of 1 to 2 inches will destroy existing weeds and mix Surflan 75WSP into the zone of weed germination.

Chemigation Use Precautions

Overtop applications with sprinkler systems utilizing tall risers may be made only to **dormant** tree fruit and nut orchards or vineyards. Make chemigation applications to **non-dormant** tree fruit and nut orchards only through solid set or hand move sprinkler systems with risers and sprinkler heads designed to distribute water uniformly beneath the tree canopy.

Surflan 75WSP - Tank Mix Recommendations

The products listed below are compatible with Surflan 75WSP when used in tank mix combination. Performance and risk of carryover from products listed below when used in combination with Surflan 75WSP at recommended rates is the same as when each product is used separately.

Follow tank-mixing instructions provided in the "General Information" section of this label when mixing Surflan 75WSP with other products.

Users should always consult the manufacturer's label of product(s) to be tank mixed with Surflan 75WSP for specific information on use rates, additional weeds controlled, rotational crop restrictions or risk of carryover, special tank mix instructions, additional use directions, precautions and limitations before use. **Note:** Some crop uses of tank mix products are limited to or excluded from certain states. Such limitations are specified in the label of the product to be tank mixed with Surflan 75WSP

Recommended Surflan 75WSP Tank Mix Combinations:

Surflan 75WSP plus Goal Surflan 75WSP plus Goal plus Gramoxone Super* Surflan 75WSP plus Gramoxone Super Surflan 75WSP plus Princep (Simazine) Surflan 75WSP plus glyphosate Surflan 75WSP plus Solicam

*Use of an agriculturally registered non-ionic surfactant is recommended with this 3-way tank mix combination to improve the compatibility of these herbicides when mixed together. Fill the spray tank one-third to one-half (1/3 to 1/2) full with clean water. With agitation running, add either one (1) quart of X-77 or two (2) quarts of Triton AG-98 per 100 gallons of spray mixture. Add the recommended amount of Surflan and mix thoroughly. Continue filling the spray tank and add Goal. Then add Gramoxone Super. If a nonionic spreader is being used, add it to the tank last. Apply in at least 50 gallons of water per acre.

Surflan 75WSP - Tank Mix Reference Table:

The following table lists approved crops for Surflan 75WSP and products for tank mixes with Surflan 75WSP

(** = Approved Crop). Refer to the table to determine if the herbicides recommended for tank mixing can be applied to your crop. For use on a given crop, two asterisks must be indicated for Surflan 75WSP and the product with which it is to be tank mixed.

	Surflan		Gramo- xone	Princep		
	75WSP	Goal	Super	(Simazine)	Glyphosate	Solicam
Almond	**	**	**	**	**	**
Apple	**	**	**	**	**	**
Apricot	**	**	**	-	**	**
Avocado	**	**	**	**	**	-
Cherry	**	**	**	**	**	-
Fig	**	**	**	-	**	-
Filbert	**	**	**	**	**	**
Grape	**	**	**	**	**	**
Grapefruit	**	-	**	**	**	**
Kiwi	**	**	**	-	**	-
Lemon	**	-	**	**	**	**
Macadamia nut	**	**	**	**	**	-
Nectarine	**	**	**	-	**	**
Olive	**	**	**	**	**	-
Orange	**	-	**	**	**	**
Peach	**	**	**	**	**	**
Pear	**	**	**	**	**	**
Pecan	**	**	**	**	**	**
Pistachio	**	**	**	-	**	-
Plum	**	**	**	**	**	**
Pomegranate	**	**	-	-	**	-
Prune	**	**	**	-	**	**
Walnut, English	**	**	**	-	**	**

Blackberry	**	-	**	**	**	**
Blueberry	**	-	**	**	**	**
Boysenberry	**	-	**	**	**	-
Currants	**	-	-	-	**	-
Dewberry	**	-	-	-	**	-
Elderberry	**	-	-	-	**	-
Gooseberry	**	-	-	-	**	-
Loganberry	**	-	-	**	**	-
Raspberry	**	-	**	**	**	**

Christmas Tree Plantations

Surflan 75WSP Alone

Apply Surflan 75WSP as a directed spray to the soil surface or as an overtop spray to established plantings of field grown Christmas tree species, including fir (*Abies spp.*), pine (*Pinus spp.*), and spruce (*Picea spp.*). Do not apply to Douglas fir (*Pseudotsuga menziesii*). Do not apply to seedbeds or seedling transplant beds. Apply only to established plantings. Established plants are defined as those that have been transplanted into their final growing location for a sufficient period of time to allow the soil to be firmly settled around the roots from packing and rainfall or irrigation. Follow all instructions provided in the "General Information" section of this label.

Broadcast Application Rates

Length of Control	Surflan 75 WSP (Ib/acre)	Minimum Time Between Applications (months)	Total Amount Allowed Per Year (Ib/acre)
Short term (2 - 4 months)	2.6	2	10.7
Long term (4 - 8 months)	5.2	2	10.7

Tank-Mix Combinations

Tank-mix combinations of Surflan 75WSP plus other labeled herbicides may be used as directed or overtop sprays in established Christmas tree plantings. When applied according to use directions, these tank-mixes will provide control of susceptible weed species listed on the respective product labels. Refer to label of the product to be tank mixed with Surflan 75WSP for specific use directions, precautions and limitations before use.

Surflan 75WSP/glyphosate: Apply tank-mix combinations of Surflan 75WSP plus glyphosate only as directed sprays in Christmas tree plantings. When applied according to use directions, Surflan 75WSP plus glyphosate will provide postemergence control of susceptible weed species listed on the glyphosate label and residual preemergence control of susceptible weed species listed on the Surflan 75WSP label. Refer to the glyphosate label for specific use directions, precautions and limitations before use.

Precautions:

Do not apply sprays containing glyphosate over the top of Christmas tree plantings. Extreme care must be exercised to avoid contact of spray containing glyphosate with foliage and stems of Christmas trees or severe damage or death may result.

IMPORTANT INFORMATION READ BEFORE USING PRODUCT

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. The Directions for Use of this product reflect the opinion of experts based on field use and tests. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of United Phosphorus, Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of United Phosphorus, Inc. and Seller. All such risks shall be assumed by Buyer and User,

and Buyer and User agree to hold United Phosphorus, Inc. and Seller harmless for any claims relating to such factors.

United Phosphorus, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or United Phosphorus, Inc., and Buyer and User assume the risk of any such use. UNITED PHOSPHORUS, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent allowed by law, United Phosphorus, Inc. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF UNITED PHOSPHORUS, INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF UNITED PHOSPHORUS, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.

United Phosphorus, Inc. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of United Phosphorus, Inc. <u>IMPORTANT INFORMATION</u>

READ BEFORE USING PRODUCT

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. 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 manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of United Phosphorus, Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of United Phosphorus, Inc. and Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold United Phosphorus, Inc. and Seller harmless for any claims relating to such factors.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, UNITED PHOSPHORUS, INC. AND SELLER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ON THIS LABEL.

To the extent consistent with applicable law, United Phosphorus, Inc. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF UNITED PHOSPHORUS, INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF UNITED PHOSPHORUS, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.

United Phosphorus, Inc. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of United Phosphorus, Inc.

Surflan is a Registered Trademark of United Phosphorus, Inc.

Rev. 8/18/10 ESL 12/28/05