

# U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505P) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460 EPA Reg. Number:

Date of Issuance:

83529-33

MAR 1 5 2013

NOTICE OF PESTICIDE:

x Registration

\_ Reregistration

(under FIFRA, as amended)

Term of Issuance: Unconditional

Name of Pesticide Product:

**Shotaran 4SC** 

Name and Address of Registrant (include ZIP Code):

Sharda USA, LLC

c/o Wagner Regulatory Associates, Inc.

P.O. Box 640

Hockessin, DE 19707

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label incommerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on her motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

The Basic Confidential Statement of Formula (CSF) dated 11/29/12 is acceptable.

This product is registered in accordance with FIFRA section 3(c)(5) provided that you:

- 1. Submit and/or cite all data required for registration review/reregistration of your product when the Agency requires all registrants of similar products to submit data.
- 2. Make the following label revision:
  - a. Assure that the establishment number and net contents are also added to the final printed label.
- 3. Submit data requirements for storage stability (830.6317) and corrosion characteristics (830.6320) within eighteen (18) months of the date of this letter.
- 4. Submit one (1) copy of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

If you have any questions regarding this notice, please contact Maggie Rudick of my staff at 703-347-0257 or rudick.maggie@epa.gov.

Signature of Approving Official:

Kable Bo Davis Project Manager 25 Herbicide Branch

Registration Division (7505P)

Date:

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GROUP

**HERBICIDE** 

# **SHOTARAN 4SC [ABN: SHURON 4SC]**

Controls Weeds in Cotton

**ACTIVE INGREDIENTS:\*** % BY WT. 41.7% Fluometuron: 1,1-dimethyl-3-( $\alpha$ ,  $\alpha$ ,  $\alpha$  -trifluoro-m-tolyl) urea **OTHER INGREDIENTS:** 58.3% TOTAL: 100.0%

# **KEEP OUT OF REACH OF CHILDREN CAUTION**

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

FIRST AID		
IF ON SKIN OR	Take off contaminated clothing.	
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.	
	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 mouth-to-mouth if possible.	
	Call a poison control center or doctor for further treatment advice.	
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 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 eye.	
	Call a poison control center or doctor for treatment advice.	

HOT LINE NUMBER: For 24 Hour Medical Emergency Assistance (Human or Animal), or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-222-1222. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

NOTE TO PHYSICIAN: If this product is ingested, lavage stomach or induce vomiting. A slurry of activated charcoal in water can be left in the stomach. Give a saline laxative and supportive therapy.

EPA Reg. No. 83529-33 EPA Est. No.\_

**GALLONS NET CONTENTS:** 

Manufactured for: Sharda USA LLC

7217 Lancaster Pike, Suite A Hockessin, Delaware 19707

MAR 1 5 2013

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. for the pesticide registered under EPA Reg No. 83529-33

<sup>\*</sup>Contains 4 lbs. active ingredient per gallon

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# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through skin. Harmful if inhaled. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Wear long-sleeved shirt and long pants, socks, shoes, and gloves. Remove and wash contaminated clothing before reuse. Avoid breathing spray mist. Avoid contact with eyes or clothing. Wear protective eyewear. Wear: Long-sleeved shirt and long pants, socks, shoes, and gloves.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are polyethylene or polyvinyl chloride. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

## Mixers and loaders using aerial application must wear:

- coveralls over long-sleeved shirt and long pants
- chemical-resistant gloves
- chemical-resistant footwear
- socks
- a chemical-resistant apron

## All other mixers, loaders, applicators, flaggers, and other handlers must wear:

- long-sleeved shirt
- long pants
- shoes and socks, and
- chemical-resistant gloves (except applicators and flaggers)

See engineering controls section for additional requirements and options.

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

## **ENGINEERING CONTROLS**

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

Enclosed Cockpits for Aerial Applicators Engineering Controls: Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard [WPS) for agricultural pesticides [40 CFR 170.240[d)[6)].

**Important:** When reduced PPE is worn because a closed system is being used, handlers must be provided all 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.

#### **USER SAFETY RECOMMENDATIONS**

## **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing/PPE immediately if pesticide gets inside; then wash thoroughly and put on clean clothing.
- 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**

Fluometuron is known to leach through soil into groundwater under certain conditions, including karst, geology areas, as a result of registered uses. Use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. 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 cleaning equipment or disposing of equipment washwaters or rinsate.

**Groundwater advisory** (for SUMTER COUNTY, GEORGIA AND THE COUNTIES OF COLBERT, LAWRENCE, LIMESTONE, MADISON, AND TUSCALOOSA, ALABAMA)

Do not apply within 100 feet of any well used for potable water. Do not apply to fields with dewatering or agricultural drainage wells. Do not apply this product within 100 feet from the edge of areas containing karst topographical features containing sinkholes, caverns, springs, and sinking or disappearing streams. Where groundwater aquifers exist at a depth of 30 feet or less from the surface, do not apply this product where soils are Hydrologic Group A.

#### INTEGRATED PEST MANAGEMENT

This product may be applied as part of an Integrated Pest Management [IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants, or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

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#### **RESISTANCE**

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of resistant weed biotypes cannot be achieved. If weed control is inadequate, it may be necessary to re-treat problem areas using a product that affects a different site of action.

To delay the proliferation and possible dominance of herbicide-resistant weed biotypes and better manage herbicide resistance, change cultural practices within and between crop seasons, by using a combination of tillage, re- treatment, tank mix partners and/or sequential herbicide applications that have a different site of action . Weed escapes that go to seed will promote the spread of resistant biotypes.

Keep accurate records of pesticide products applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide application methods available in your area.

#### **DIRECTIONS FOR USE**

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

SHOTARAN 4SC is a suspension concentrate containing 4 pounds of active ingredient per gallon of product.

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

This product is NOT approved for use in Sumter County, Georgia and in the counties of Colbert, Lawrence, Limestone, Madison, and Tuscaloosa in Alabama.

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## **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 IPPE) 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.

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 worn over a short-sleeved shirt and short pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks, and
- Protective eyewear

SHOTARAN 4SC controls annual grasses and annual broadleaf weeds in cotton, including:

## **Annual Grass Weeds**

Barnyardgrass

Foxtail

Crabgrass Crowfootgrass Goosegrass Ryegrass

Fall panicum

Signalgrass (Brachiaria)

**Annual Broadleaf Weeds** 

Buttonweed

**Pigweed** 

Cocklebur

Prickly sida (teaweed)

Florida pusley

Purslane Ragweed

Groundcherry (Wright)

Sesbania

Jimsonweed Lambsquarters

Sicklepod

Marestail (Horseweed)

Smartweed

Morningglory

Tumbleweed

**SHOTARAN 4SC** applied at 4 pts per acre is not effective in controlling established perennial weeds such as Johnsongrass from rhizomes.

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#### Cotton

Apply SHOTARAN 4SC preplant, preemergence, and postemergence.

For pre plant and preemergence treatment only, tank mix SHOTARAN 4SC with most liquid nitrogen fertilizers. SHOTARAN 4SC can be combined with other herbicides in cotton as directed in the COMBINATIONS section.

## **Preplant/Preemergence Precautions**

SHOTARAN 4SC used preplant or preemergence in combination with a soil-applied organophosphate insecticide applied at planting can result in cotton injury. Applying SHOTARAN 4SC to cotton in combination with any product containing clomazone can result in crop injury. To the extent consistent with applicable law, Sharda USA LLC will not be held responsible for losses or damage resulting from such uses of this product with any clomazone-containing product.

Rainfall that is sufficient to germinate seeds or for growing crops is adequate to activate the herbicidal activity of SHOTARAN 4 SC. The herbicidal activity of SHOTARAN 4SC may be delayed or reduced under dry weather conditions. Cultivate if weeds develop.

## **Preplant/Preemgergence Restrictions**

- Do not make a second application of SHOTARAN 4SC earlier than 20 days following the initial application.
- Do not make more than two applications of SHOTARAN 4SC to the same crop in the same field in any given year.
- AZ and NM: Do not apply within 60 days of harvest. Do not feed foliage from treated cotton plants to livestock.
- Do not plant crops other than cotton after the last application of SHOTARAN 4SC without the following plantback intervals or crop injury may occur.

## Plantback intervals for the following crops (except for AZ and NM):

Wheat:	3 months
Corn (field, sweet) and peanuts:	8 months
Rice, grain sorghum, and soybeans:	9 months
All other crops:	12 months

## **Table 1. Application Soil Restrictions**

Broadcast Rates per Pints per Acre of SHOTARAN 4SC and Active Ingredient Equivalent

Søil Texture	Maximum One-Time Application Rate	Annual Maximum Number Of Applications Per Year	Annual Maximum Application Rate
Sand, loamy sand, and sandy loam soils	2 pts. (1 lb. ai/A)	2	4 pts. (2 lbs. ai/A)
Loam, silt loam, silt, sandy clay loam, silty clay loam, and clay loam soils	3.2 pts. (1.6 lbs. ai/A)	2	6 pts. (3 lbs. ai/A)

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			Revised 20	120213
Sandy clay, silty clay,	4 pts. (2 lbs. ai/A)	2	6 pts.	pg. 7
and clay soils			(3 lbs. ai/A)	

## **Additional State and Local Requirements**

Applicators must follow all state and local pesticide drift requirements regarding application of products containing Fluometuron. Where states have more stringent regulations, they must be observed. Before applying **SHOTARAN 4SC**, refer to Table 1 in the Application Soil Restrictions section for specific application rate/soil restrictions.

AR, LA, and MS only: Use 1.6 pints of SHOTARAN 4SC per acre on sandy loam soils low in organic matter.

**AZ and NM only:** Cotton, corn, and grain sorghum can be planted the next spring. Do not plant treated areas to other crops until 1 year after last application. Do not use on sandy or coarse-textured soil of less than 1% organic matter.

West TX only: Do not use SHOTARAN 4SC on sandy, loamy sand, or fine sandy loam soils. Do not use SHOTARAN 4SC on cotton planted in furrows.

## Preplant treatment (except AZ and NM)

SHOTARAN 4SC may be applied for burndown of existing annual weeds and residual control of weeds prior to planting cotton. Apply 2 to 4 pints per acre of SHOTARAN 4SC 15 to 75 days prior to anticipated planting. Use the lower rate on light silt and sandy soils low in organic matter. Apply before weeds germinate or before weed seedlings are more than 2 inches tall. If weeds are emerged prior to application, add a surfactant. When emerged weeds are taller than 2 inches, or weeds not listed on the SHOTARAN 4SC label are present, SHOTARAN 4SC may be tank mixed with other products registered for preplant applications in cotton. Consult tank mix product labels for specific rate instructions and precautions. Early preplant applications may require additional weed control before planting. Refer to Table 1 in the Application Soil Restrictions section for specific application rate/soil restrictions before applying SHOTARAN 4SC.

Preemergence applications of herbicides with a similar mode of action (such as diuron) following a preplant application of **SHOTARAN 4SC** may result in cotton injury. This is most critical where applications of **SHOTARAN 4SC** are made less than 30 days preplant, on coarse-textured soils, and on soils low in organic matter.

Mares tail (Horseweed): For improved residual control of mares tail, apply a preplant burndown tank mix of glyphosate plus dicamba DGA plus **SHOTARAN 4SC**, or glufosinate ammonium plus **SHOTARAN 4SC**.

## Preplant Incorporated Use (AZ and NM)

Apply 3.2 pints per acre of **SHOTARAN 4SC** preplant as a broadcast spray after the beds for preplant irrigation are formed. Apply before the beds are dragged off (use a bed shaper set to remove 1 to 2 inches from beds) in preparation for planting. Furrow irrigation should precede the application and planting should follow as soon as possible. Plant into untreated soil after drag-off and return treated soil to the beds when furrows are reformed. Do not allow furrow irrigation water to pond over the beds. Before applying **SHOTARAN 4SC**, refer to Table 1 in the Application Soil Restrictions section for specific application rate/soil restrictions.

## **Preemergence Treatment**

Apply 2 to 4 pints **SHOTARAN 4SC** per acre. Use the lower rate on light silt and sandy soils low in organic matter. Before applying **SHOTARAN 4SC**, refer to Table 1 in the Application Soil Restrictions section for specific application rate/soil restrictions.

#### Plantback intervals must be as follows:

• Wheat: 3 months

Corn (field & sweet) & peanuts: 8 months
Rice, grain sorghum, and soybeans: 9 months

• All other crops: 12 months

#### **Postemergence Treatments**

SHOTARAN 4SC may be applied postemergence to cotton, but preemergence to weeds or postemergence to both cotton and weeds. Apply 2 to 4 pints per acre of SHOTARAN 4SC. Apply as a directed, semi-directed, or over-the-top spray. Apply SHOTARAN 4SC to cotton plants at any stage of growth from 3 inches high to layby. Use the higher rate when applying postemergence to weeds; weeds should be no taller than 2 inches. Postemergence herbicidal activity of SHOTARAN 4SC can be enhanced by using a surfactant that is FDA-approved for use on food and feed crops and is compatible with SHOTARAN 4SC. The surfactant rate should not exceed 0.5% of the carrier volume (1 pint per 25 gallons of water). Before applying SHOTARAN 4SC, refer to Table 1 in the Application Soil Restrictions section for specific application rate/soil restrictions.

#### **COMBINATIONS**

Pyrimax® 3.2L and other products containing 3 lbs./gal. of pyrithiobac sodium: A program of pyrithiobac sodium at 1.3 - 2.1 fl. oz./A plus SHOTARAN 4SC at 2 to 4 pints per acre applied preemergence followed by pyrithiobac sodium early postemergence can be used for improved control of bristly starbur, coffee senna, common ragweed, Florida beggarweed, hemp sesbania, jimsonweed, ladysthumb, smartweed, lambsquarters, annual morningglory (cypressvine, entireleaf, ivyleaf, pitted, purple, red/scarlet, sharppod/cotton, smallflower), Pennsylvania smartweed, pigweed (red root, smooth, spiny), prickly sida, spotted spurge, spurred anoda, velvetleaf, and for suppression of palmer pigweed. On light silt and sandy soils low in organic matter, use the lower rate. Before applying SHOTARAN 4SC, refer to Table 1 in the Application Soil Restrictions section for specific application rate/soil restrictions.

## Specific Weed Problems (Sicklepod, Wild Poinsettia, Yellow Nutsedge)

For improved control of the above weeds and other labeled weeds that often occur in high populations and/or have multiple seasonal flushes, a program of pyrithiobac sodium at 1.7-2.1 fl. oz./A plus SHOTARAN 4SC at 2 to 4 pints per acre applied preemergence followed by a postemergence application of pyrithiobac sodium alone or in combination with MSMA or DSMA is recommend. On light silt and sandy soils low in organic matter, use the lower rate. Before applying SHOTARAN 4SC, refer to Table 1 in the Application Soil Restrictions section for specific application rate/soil restrictions.

## Products containing 8 lbs./gal. of Metolachlor

Use in a tank mixture with **SHOTORAN 4SC** preemergence in cotton for control of all weeds as listed on both labels. This combination will also control spotted spurge, hyssop spurge, nodding spurge, and prostrate spurge. Apply to the soil surface at planting or after planting, but before weeds or crops emerge, using the appropriate rates from the following table.

## SHOTARAN 4SC + Parallel® PCS or other metolachlor products - Cotton Broadcast Rates per Acre pg. 9

Soil Texture	SHOTARAN 4SC (pts)	(Paralle	etolachlor el PCS or other hlor products) (pts) Area 2***
Sand, loamy sand		DO NOT U	JSE
Sandy loam*	2.0	0.75 - 1.0	0.85 - 1.0
Loam, silt loam, silt	2.0-3.2	1.0-1.33	1.0-1.33
Fine soil	3.2-4.0	1.0-1.33	1.33

<sup>\*</sup>Use on sandy loam soils only in eastern OK, Gulf Coast, Rio Grande Valley, and eastern TX

#### **Combination Restrictions:**

- Do not apply **SHOTARAN 4SC** + Parallel PCS or other metolachlor products on sand or loamy sand soils or in areas where water is likely to "pond" over the bed or crop injury may occur.
- Do not apply broadcast to furrow-planted cotton.
- The use of SHOTORAN 4SC preplant or preemergence in conjunction with a soil-applied organophosphate insecticide at planting may result in injury to cotton. In addition, SHOTARAN 4SC applied to cotton with any application of Command (clomazone) herbicide may result in crop injury. To the extent consistent with applicable law, Sharda USA, LLC will not be held responsible for losses or damage resulting from such uses.
- Do not use on Taloka silt loam, or crop injury may occur. Before applying SHOTARAN 4SC, refer
  to Table 1 in the Application Soil Restrictions for specific application rate/soil restrictions.

Refer to the appropriate metolachlor label for further instructions, precautions, and limitations.

Note: Do not feed treated forage to livestock or graze treated areas.

**Rotational Crops:** Refer to the crop rotation instructions for **SHOTARAN 4SC** alone on this label and for metolachlor alone on the Parallel PCS or other metolachlor product label.

Triflurex® HFP or other products containing 4 lbs. per gallon of trifluralin: Use in a tank mixture with SHOTARAN 4SC (all areas except AZ) or before an overlay with SHOTARAN 4SC in cotton for control of all weeds listed on both labels.

For the tank mixture, follow soil preparation and incorporation procedures for Trifluralin 4 lbs./gal. products. Apply **SHOTARAN 4SC** + trifluralin tank mix at rates specified below in a minimum of 15 gallons of water per acre.

<sup>\*\*</sup>AREA 1 = AR, LA, MS, BOOTHEEL OF MO AND TN

<sup>\*\*\*</sup>AREA 2 = Eastern OK, Gulf Coast, Rio Grande Valley and Eastern TX

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## SHOTARAN 4SC + Trifluralin 4 lbs./gal. product-Cotton (all areas except AZ)

	Broadcast Rates Per Acre		
Soil Texture	SHOTARAN 4SC	Trifluralin (4 lbs/gal)	
Sand, loamy sand, sandy loam	2 pts.	1 pt.	
Loam, silty clay loam*, silt loam, silt, sandy clay loam*, clay loam	3.2 pts.	1.5 pts.	
Clay, clay loam, silty clay loam*, silty clay, sandy clay, sandy clay loam*	4 pts.	2 pts.	

<sup>\*</sup>Silty clay loam and sandy clay loam are transitional soils. If these soils are predominantly sand or silt, they are usually classified as medium-textured soils. If predominantly clay, they are classified as fine-textured soils.

For the overlay, apply **SHOTARAN 4SC** as a pre emergence soil surface treatment as specified on this label at 2 - 4 pints per acre after a preplant soil incorporated treatment of Trifluralin 4 lbs./gal. product. Apply Trifluralin 4 lbs./gal. product as specified on its label at 1 - 2.5 pints per acre.

#### SHOTARAN 4SC + Trifluralin Restrictions:

- Do not use the tank mix in AZ. Do not apply the tank mix of **SHOTARAN 4SC** + Trifluralin in liquid fertilizer.
- Refer to the Trifluralin label for directions, precautions, and limitations for use of that product as well as the directions, precautions, and limitations on this SHOTARAN 4SC label.
- Before applying SHOTARAN 4SC, refer to Table 1 in the Preplant/Preemgergence Restrictions for specific application rate soil restrictions.

**PROWL®** and other Pendimethalin products: Apply SHOTARAN 4SC as a preemergence surface treatment as specified on this label at 2 - 4 pts per acre after a preplant treatment of Prowl or other appropriate pendimethalin product for control of all weeds listed on both labels. Refer to the pendimethalin product label for directions, precautions, and limitations for use of that product. Before applying SHOTARAN 4SC, refer to Table 1 in the Application Soil Restrictions for specific rate/soil restrictions.

**DSMA OR MSMA: SHOTARAN 4SC** may be tank mixed with DSMA or MSMA and applied as a directed spray to cotton from 3 inches high to first bloom. Use the broadcast rate of 2 - 4 pts. of **SHOTARAN 4SC** per acre and the necessary amount of DSMA or MSMA plus 0.5% (1 pint per 25 gals.) of a surfactant that is approved by FDA for use on food and feed crops and is compatible with **SHOTARAN 4SC** + DSMA or

**SHOTARAN 4SC** + MSMA when applied to cotton. When using this mixture, do not allow spray to contact cotton foliage. Do not graze treated areas or feed treated forage to livestock. Adhere strictly to the dosage, precautions, and limitations of the labels of the products. Before applying **SHOTARAN 4SC**, refer to Table 1 in the Application Soil Restrictions for specific application rate/soil restrictions.

#### **APPLICATION PROCEDURES MIXING INSTRUCTIONS**

- 1. Fill spray tank 1/2 to 3/4 full with clean water or nitrogen solution.
- 2. Start agitation.
- 3. Pour SHOTARAN 4SC directly from the container into the partially filled spray tank.
- 4. If **SHOTARAN 4SC** is to be tank mixed with another herbicide, add that product after the **SHOTARAN 4SC** is thoroughly mixed in the partially filled spray tank.
- 5. Add the rest of the water or nitrogen solution.
- 6. Provide agitation during mixing and application to maintain a uniform suspension.

To determine compatibility, add two teaspoons of **SHOTARAN 4SC** to one pint of nitrogen solution (equals 4 pts. in 25 gals.; if using other application rates, adjust compatibility test amounts proportionally). Stir or shake thoroughly and let stand 5 minutes. If the mixture remains mixed or can be remixed readily, it is compatible and can be used. If **SHOTARAN 4SC** settles out when mixed with a nitrogen solution, a suspensibility agent such as Unite®, Compex®, or equivalent at 1-3 pts per 100 gals. fertilizer may improve compatibility. Add 1/8 - 3/8 teaspoon of suspensibility agent to the compatibility test to determine its effectiveness.

#### **EQUIPMENT**

Clean sprayer thoroughly prior to use. Do not use a sprayer contaminated with 2,4-D or other materials, as crop damage or sprayer clogging may result.

All application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Use properly calibrated conventional spray equipment that will apply spray uniformly and has hydraulic or mechanical agitation (except in Arizona where only mechanical agitators are recommended). Screens in nozzles, in suction, and in-line strainers should be no finer than 50-mesh. Use a pump with capacity to maintain 35-40 psi at the nozzles. If hydraulic agitation is used, the pump should also provide sufficient agitation in the tank to keep the mixture in suspension. Avoid leaving spray mixture in tank without constant agitation. If bypass agitation is used, it should terminate at the bottom of the tank to minimize foaming. Wash sprayer thoroughly with clean water immediately after use.

Apply in a minimum of 10 gals, per acre for preplant incorporated or preemergence applications, or apply in a minimum of 20 gals, per acre for postemergence application.

#### **BAND TREATMENT**

For band treatment, calculate the amount of SHOTARAN 4SC needed by the formula:

Band width in inches X Broadcast rate
Row width in inches per acre

 Amount needed per acre of field

#### SPRAY DRIFT MANAGEMENT

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

Wind Speed: Do not apply at wind speeds greater than 15 mph.

Droplet Size: Apply as a medium or coarser spray (ASAE Standard 572).

Temperature Inversions: If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions. Other State and Local Requirements: Applicators must follow all state and local pesticide drift requirements regarding application of Fluometuron. Where states have more stringent regulations, they must be observed.

**Equipment:** All application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

## Additional requirements for aerial applications:

- 1. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- 2. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.
- 3. When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

## Additional requirement for ground boom application:

1. Do not apply with a nozzle height greater than 4 feet above the crop canopy.

#### **Sensitive Areas**

**SHOTARAN 4SC** should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from sensitive areas).

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Keep container closed when not in use. Store product in original container only, away from food or feed.

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

# **CONTAINER DISPOSAL:**

Nonrefillable Container (five gallons 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 and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then puncture and dispose of in a sanitary landfill, incinerate or burn, if allowed by state and local authorities. Stay out of smoke from burning container.

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**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 must be followed carefully. 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 Sharda USA, LLC ("SHARDA") or Seller. To the extent consistent with applicable law, Buyer and User agree to hold SHARDA and Seller harmless for any claims relating to such factors.

SHARDA 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.

To the extent consistent with applicable law:

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