

9779-312

6-17-1994

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**ACCEPTED**  
 JUN 17 1994  
 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 9779-312

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**FLUOMETURON 4L**

For weed control in cotton

ACTIVE INGREDIENT		
Fluometuron [1,1-dimethyl-3-(alpha, alpha, alpha-trifluoro- <i>m</i> -tolyl) urea] . . . . .		41.7%
INERT INGREDIENTS . . . . .		58.3%
	Total	100.0%

Contains 4 lbs. fluometuron per gallon.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

**STATEMENT OF PRACTICAL TREATMENT**

**IF IN EYES:** Immediately flush with large amounts of water. Get medical attention if irritation persists.  
**IF ON SKIN:** Wash affected skin areas thoroughly with soap and water. Get medical attention.  
**IF SWALLOWED:** Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Call a physician, hospital, or Poison Control Center immediately.  
**IF INHALED:** Move subject to fresh air. Get medical attention.  
**NOTE TO PHYSICIAN:** If the patient has ingested fluometuron, induce emesis or lavage stomach. Administer a saline laxative and supportive treatment.

**PRECAUTIONARY STATEMENTS**

**CAUTION**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

Causes moderate eye irritation. Harmful if absorbed through skin, inhaled, or swallowed. Avoid contact with eyes, skin, or clothing. Avoid breathing vapors or spray mist.

**Personal Protective Equipment:**

Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, shoes plus socks and protective eyewear.

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.

**USER SAFETY RECOMMENDATIONS**

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing 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**

Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

Read Additional PRECAUTIONARY STATEMENTS.

EPA Reg. No. 9779-312

EPA Est. No. 37429-GA-1

Manufactured For  
 Riverside/Terra Corporation  
 P.O. Box 6000, Sioux City, Iowa 51102-6000  
*Riverside Serves Agriculture. Agriculture Serves Everyone.*

NET CONTENTS  
GALS.

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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 through any type of irrigation system.

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.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, waterproof gloves, shoes plus socks and protective eyewear.

STORAGE AND DISPOSAL

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL.

STORAGE

Store in a dry location away from children, animals, foods, feeds, seeds, or other agricultural chemicals. Handle in accordance with information given under PRECAUTIONARY STATEMENTS. In the event of spillage or leakage, soak up material with absorbent clay, sand, sawdust, or other absorbent material. Scrape up and dispose of in accordance with information given under DISPOSAL. Repackage and relabel useable product in a sound container. In case of fire or other emergency, report at once by toll-free telephone to 800-424-9300.

DISPOSAL

PESTICIDE DISPOSAL: Wastes resulting from the use of 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 by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

Fluometuron 4L is effective for annual grass and annual broadleaf weed control in cotton. Fluometuron 4L applied according to label directions will control the following annual weeds in cotton:

Broadleaf Weeds

- |                       |                        |
|-----------------------|------------------------|
| Buttonweed            | Prickly sida (teaweed) |
| Cocklebur             | Purslane               |
| Florida pusley        | Ragweed                |
| Groundcherry (Wright) | Sesbania               |
| Jimsonweed            | Sicklepod              |
| Lambsquarters         | Smartweed              |
| Morningglory          | Tumbleweed             |
| Pigweed               |                        |

Grass Weeds

- |               |                          |
|---------------|--------------------------|
| Barnyardgrass | Foxtail                  |
| Crabgrass     | Goosegrass               |
| Crowfootgrass | Ryegrass                 |
| Fall panicum  | Signalgrass (Brachiaria) |

Established perennial weeds such as Johnsongrass from rhizomes is not controlled by a 4 pt./acre rate.

APPLICATION PROCEDURES

Mixing Instructions: Fill spray tank 1/2 full with water or nitrogen solution. Start agitation. Pour Fluometuron 4L directly from the container into the partially filled spray tank. If Fluometuron 4L is to be tank mixed with another herbicide, add that product after the Fluometuron 4L is thoroughly mixed. Add the rest of the water or nitrogen solution. Agitate during mixing and application to maintain uniform suspension.

To determine compatibility, add two teaspoons of Fluometuron 4L to one pint of nitrogen solution, equivalent to 4 pints in 25 gallons. If using other application rates, adjust compatibility test rates proportionally. Stir or shake thoroughly. Let stand 5 minutes. If it remains mixed or can be remixed readily, the mixture is compatible. If Fluometuron 4L settles out when mixed with a nitrogen solution, a compatibility agent at 1 to 3 pints per 100 gallons-fertilizer may improve compatibility. Add 1/8 to 3/8 teaspoon of the compatibility agent to determine effectiveness.

**Band Treatment:** For band applications, the following formula may be used to calculate the amount of Fluometuron 4L required:

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} \times \text{broadcast rate per acre} = \text{amount needed per acre of field}$$

**Equipment:** Thoroughly clean sprayer prior to use. Do not use a sprayer contaminated with 2,4-D or other materials as crop damage or sprayer clogging may result.

Use properly calibrated conventional spray equipment that will apply spray uniformly and has hydraulic or mechanical agitation, except in California or 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 gallons per acre for preplant incorporated or preemergence applications, or apply in a minimum of 20 gallons per acre for postemergence application.

~~**Aerial Application:** Apply Fluometuron 4L in a minimum of 5 gallons of water per acre. Avoid applications under conditions where uniform coverage cannot be obtained or where a residue spray will occur.~~

**COTTON**

Fluometuron 4L may be applied as a preemergence treatment to the surface of the soil, or lightly incorporated immediately after planting, or as a directed, semidirected, or over-the-top postemergence application. For preemergence treatment only, Fluometuron 4L may be tank-mixed with most liquid nitrogen fertilizers. It also may be combined with other herbicides in cotton as directed in the section, "Combinations."

Fluometuron 4L is most effective when used as follows:

1st Application: Preemergence broadcast. See "Preemergence Treatment" below.

2nd Application: Postemergence, directed, semidirected or over-the-top when cotton is 3-6 inches high. See "Postemergence Treatments" below.

3rd Application: If needed, postemergence, directed, or semidirected, at layby (last normal cultivation), using no more than 2 pints per acre.

Preemergence Treatment

Apply Fluometuron 4L at a rate of 2 to 4 pints per acre. On light silt and sandy soils, low in organic matter, use the lower rate.

Fluometuron 4L may be applied to the surface of the soil, or lightly incorporated into the soil, after planting cotton.

Preplant Incorporated Use (Arizona, California, and New Mexico)

Fluometuron 4L may be applied preplant as a broadcast spray at 3.2 pints per acre after the beds for preplant irrigation have been formed. Apply before the beds are dragged off (using 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.

Postemergence Treatments

Fluometuron 4L may be applied postemergence to cotton but preemergence to weeds, or postemergence to both cotton and weeds. Fluometuron 4L should be applied at rates of 2 to 4 pints per acre. Apply as a directed, semidirected, or over-the-top spray. Fluometuron 4L may be applied 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 2 inches high or less. Use of a surfactant that is approved by FDA for use on food and feed crops and is compatible with Fluometuron 4L when applied to cotton may, enhance the postemergence herbicidal activity of Fluometuron 4L. The surfactant rate should not exceed 0.5% of the carrier volume (1 pint per 25 gallons of water). Do not apply within 60 days of harvest.

Rainfall that is sufficient to germinate seeds or for growing crops is adequate to activate the herbicidal activity of Fluometuron 4L. Where dry weather conditions prevail, the herbicidal activity of Fluometuron 4L may be delayed or reduced. Cultivate if necessary.

Do not make more than three applications of Fluometuron 4L to the same crops or field in any one year. Do not plant crops other than cotton within 6 months of the last application of Fluometuron 4L or injury may result.

The use of Fluometuron 4L as a preemergence or early postemergence application, following the use of a systemic insecticide at planting, may result in injury to cotton.

West Texas only: Do not use Fluometuron 4L on sandy, loamy sand, or fine sandy loam soils. Do not use Fluometuron 4L on cotton planted in furrows.

Arkansas, Louisiana, and Mississippi only: Use 1.6 pints of Fluometuron 4L per acre on sandy loam soils low in organic matter.

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

Do not apply within 60 days of harvest.

Do not feed foliage from cotton plants or gin trash to livestock.

Combinations:

Dual® 8E: Use in a tank mixture with Fluometuron 4L preemergence in cotton for control of all weeds on both labels. Apply to the soil surface at planting or after planting, but before weeds or crop emerge, using the appropriate rates below.

Fluometuron 4L + Dual 8E (AR, LA, MS, Eastern OK, TN, Bootheel of MO, and Gulf Coast, Rio Grande Valley and Eastern TX).

Soil texture	Broadcast rates per acre	
	Fluometuron 4L	Dual 8E
Sand, loamy sand	DO NOT USE	
Sandy loam*	2 pints	1.25 to 1.5 pints
Loam, silt, silt loam	2 to 3.2 Pints	1.5 to 2 pints
Silty clay loam, sandy clay loam, silty clay, sandy clay, clay loam, clay	3.2-4 pints	2 pints

\*Use on sandy loam soils only in eastern OK and Gulf Coast: Rio Grande Valley, and eastern TX.

Do not apply Fluometuron 4L + Dual 8E 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 Fluometuron 4L following the use of a systemic insecticide at planting may result in crop injury. Do not use on Taloka silt loam or crop injury may occur.

Refer to the Dual 8E label for further instructions, precautions, and limitations.

Do not feed treated forage or gin trash to livestock, or graze treated areas.

Rotational Crops: Refer to the crop rotation instructions for Fluometuron 4L alone on this label and for Dual 8E alone on the Dual 8E label.

Trifluralin 4EC: Use in a tank mixture with Fluometuron 4L (all areas except Arizona and California) or before an overlay with Fluometuron 4L in cotton for control of all weeds listed on both labels.

For the tank mixture, follow soil preparation and incorporation procedures for Trifluralin 4EC. Apply Fluometuron 4L + Trifluralin 4EC tank mix rates specified below in a minimum of 15 gallons of water per acre.

Fluometuron 4L + Trifluralin 4EC Tank Mixture (except Arizona and California)

Soil texture	Broadcast rates per acre	
	Fluometuron 4L	Trifluralin 4EC
Sand, loamy sand, sandy loam	2 pints	1 pint
Loam, silty clay loam*, silt loam, silt, sandy clay loam*	3.2 pints	1.5 pints
Clay, clay loam, silty clay loam*, silty clay, sandy clay, sandy clay loam*	4 pints	2 pints

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

For the overlay, apply Fluometuron 4L as a preemergence soil surface treatment as recommended on this label at 2 to 4 pints per acre after a preplant soil incorporated treatment of Trifluralin 4EC. Apply Trifluralin 4EC as recommended on its label at 1 to 2.5 pints per acre.

Do not use the tank mix in Arizona and California. Do not apply the tank mix of Fluometuron 4L + Trifluralin 4EC in liquid fertilizer. Refer to the Trifluralin 4EC label for directions, precautions, and limitations for use of that product, as well as the directions, precautions, and limitations on this Fluometuron 4L label.

Prowl®: Apply Fluometuron 4L as a preemergence surface treatment as recommended on this label at 2 to 4 pints per acre after a preplant soil-incorporated treatment of Prowl for control of all weeds listed on both labels. Apply Prowl as recommended on its label at 1-3 pints per acre. Apply Prowl as recommended on its label precautions, and limitations for use of that product.

DSMA or MSMA: Fluometuron 4L may be tank-mixed with DSMA or MSMA and applied as a directed spray to cotton from three inches high to first bloom. Use the broadcast rate of 2 to 4 pints of Fluometuron 4L per acre and the necessary amount of DSMA or MSMA plus 0.5% (1 pint per 25 gallons) of a surfactant that is approved by FDA for use on food and feed crops and is compatible with Fluometuron 4L + DSMA or Fluometuron 4L + 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 or gin trash to livestock. Adhere strictly to the dosage, precautions and limitations of the labels of the products.

Dual® trademark of CIBA-GEIGY for metolachlor  
Prowl® trademark of American Cyanamid for pendimethalin

NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to Seller, and Buyer assumes the risk of any such use.

