

51036-242

07/19/2004

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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

JUL 19 2004

Mr. Bill Washburn
Regulatory Affairs Specialist
Micro Flo Company, LLC
P.O. Box 772099
Memphis, TN 38117

Subject: Revised CSF and Label Amendments for Flo-Met 80DF
EPA Reg. No. 51036-242
Your submission dated June 3, 2004

Dear Mr. Washburn:

The revised CSF formulation referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, has been reviewed and is accepted as complying with PR Notice 98-10. This formulation will be added to your file as part of the record.

A review of the labeling, however, found a number of amendments that need to be made:

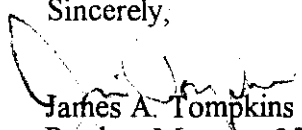
1. The highest toxicity category for this end-use product is a III, therefore, change the signal word from "WARNING" to "CAUTION," and remove the Spanish signal word and statement.
2. Under the PPE statement and the Agricultural Use Requirements, change "waterproof gloves" to "chemical-resistant gloves."
3. Place a border around the User Safety Recommendations and the Agricultural Use Requirements.
4. To the first sentence of the second paragraph under Mixing Instructions, add "of Flo-Met 80DF with other products" after "To determine compatibility."
5. Add Spray Drift Reduction Advisory after Aerial Application. See attached.
6. Under the Arizona, California, and New Mexico Only statements for Postemergence Treatments, change to "Do not plant..." statement to:
"Do not plant other crops in Flo-Met 90 DF treated areas for one year after last application."
7. Under the Dual® 8E section of the Combinations for Use on Cotton, delete "not" from the "Apply to the soil surface..." statement.
8. Also in the Dual® 8E section, change "Active Plus" to "Activate Plus."
9. Add the statement: "Refer to the Dual® 8E label for further restrictions, precautions and limitations" to this section.

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10. Under Zorial Rabid 80®, add an "I" to "imitations" in the last sentence of this section.

Submit one copy of final printed labeling incorporating the above changes by notification before you release the product for shipment. This amended labeling will supercede all previously accepted labels. A stamped copy of the labeling is enclosed for your records. If you have any questions or concerns, please contact Tracy W. Hayes at (703) 308-9358.

Sincerely,



James A. Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505C)

JUL 19 2004
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

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EPA

FLO-MET 80DF
FOR WEED CONTROL IN COTTON

51036-242

ACTIVE INGREDIENT:

Fluometuron (1,1-dimethyl-3- (α,α,α , -trifluoro-m-tolyl) urea)..... 80.00%

INERT INGREDIENTS: 20.00%

TOTAL: 100.00%

KEEP OUT OF REACH OF CHILDREN

WARNING AVISO

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	<ul style="list-style-type: none">• 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.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
IF SWALLOWED	<ul style="list-style-type: none">• 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 the poison control center or doctor.• Do not give anything by mouth to an unconscious person.
IF INHALED	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.• Do not give anything by mouth to an unconscious person.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also call 1-800-832-4357 for emergency medical treatment.	
NOTE TO PHYSICIAN	
If the patient has ingested fluometuron, induce emesis or lavage stomach. Administer a saline laxative and supportive treatment.	

EPA Reg. No. 51036-242
AD xxxxxx

EPA Est. No. 51036-GA-01
NET CONTENTS: _____

Manufactured By:
MICRO FLO COMPANY LLC
P.O. BOX 772099
MEMPHIS, TN 38117

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

Causes eye irritation. Do not get in eyes, or on skin. Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing vapors or spray mist.

Emergency telephone number for:

800-424-9300	CHEMTREC (transportation or spill)
800-832-HELP (4357)	Human Health
800-345-4735	ASPCA (Animal health)

PERSONAL PROTECTIVE EQUIPMENT

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

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

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40CFR 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 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.

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 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
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, scrape up spillage. If spillage is not suitable for use, 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.

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: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or if allowed by state or local authorities, by burning. If burned, stay out of smoke

GENERAL INFORMATION

FLO-MET 80 DF is effective for annual grass and annual broadleaf weed control in cotton. FLO-MET 80 DF applied according to label directions will control the following annual weeds:

ANNUAL BROADLEAF WEEDS

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

ANNUAL GRASS WEEDS

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

Established perennial weeds such, as Johnsongrass from rhizomes is not controlled.

APPLICATION PROCEDURES

BAND TREATMENT: For band applications, the following formula may be used to calculate the amount of FLO-MET 80 DF required:

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

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 pre-emergence applications, or apply in a minimum of 20 gallons per acre for postemergence application.

MIXING INSTRUCTIONS:

Fill spray tank 1/2 full with water or nitrogen solution. Start agitation. Pour FLO-MET 80DF directly from the container into the partially filled spray tank. If FLO-MET 80DF is to be tank mixed with another herbicide, add that product after the FLO-MET 80DF 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 FLO-MET 80DF to one pint of nitrogen solution, equivalent to 2.5 pounds 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 FLO-MET 80DF 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.

AERIAL APPLICATION:

Apply FLO-MET 80DF in a minimum of 5 gallons of water per acre. Avoid applications under conditions where uniform coverage cannot be obtained or where extensive spray drift may occur.

COTTON

FLO-MET 80DF 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 FLO-MET 80DF may be tank-mixed with most liquid nitrogen fertilizers. FLO-MET 80DF may be combined with other herbicides in cotton as directed in the section, "Combinations."

FLO-MET 80DF 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 to 6 inches high. See Postemergence Treatments below.

3RD APPLICATION:

If needed, postemergence, directed, or semidirected, at layby (last normal cultivation), using no more than 1.25 pounds per acre.

PREEMERGENCE TREATMENT:

Apply FLO-MET 80DF at a rate of 1.25 to 2.5 pounds per acre. On light silt and sandy soils low in organic matter, use the lower rate. FLO-MET 80DF 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):

FLO-MET 80DF may be applied preplant as a broadcast spray at 2.0 pounds 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:

FLO-MET 80DF may be applied postemergence to cotton but preemergence to weeds, or postemergence to both cotton and weeds. FLO-MET 80DF should be applied at rates of 1.25 to 2.5 pounds per acre. Apply as a directed, semidirected, or over-the-top spray. FLO-MET 80DF 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 FLO-MET 80DF when applied to cotton may enhance the postemergence herbicidal activity of FLO-MET 80DF. The surfactant rate should not exceed 0.5% of the carrier volume (1 pint per 25 gallons of water).

Application Precautions:

Rainfall that is sufficient to germinate seeds or for growing crops is adequate to activate the herbicidal activity of FLO-MET 80DF. Where dry weather conditions prevail, the herbicidal activity of FLO-MET 80DF may be delayed or reduced. Cultivate if necessary.

Do not make more than three applications of FLO-MET 80DF to the same crops or field in any one year. Do not plant crops other than cotton or sugarcane within 6 months of the last application of FLO-MET 80DF or injury may result.

The use of FLO-MET 80DF 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 FLO-MET 80DF on sandy, loamy sand, or fine sandy loam soils. Do not use FLO-MET 80DF on cotton planted in furrow.

ARKANSAS, LOUISIANA, AND MISSISSIPPI ONLY:

Use 1 pound of FLO-MET 80DF per acre on sandy loam soils low in organic matter.

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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 FOR USE ON COTTON

Dual® 8E: Use in a tank mixture with FLO-MET 80DF 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 prostate spurge. Apply to the soil surface at planting or after planting, but not before weeds or crops emerge, using the appropriate rates from the table below.

Note: Incompatibility may occur, add Active Plus at 0.5% volume/volume spray (4 pints/100 gal.) to help overcome this condition.

FLO-MET 80DF + Dual® 8E - Cotton (AR, LA, MS, Eastern OK, TN, Bootheel of MO and Gulf Coast, Rio Grand Valley and Eastern TX):

Broadcast Rates Per Acre		
Soil Texture	FLO-MET 80DF	DUAL® 8E
Sand, loamy sand	DO NOT USE	
Sandy loam*	1.25 pounds	1.25 - 1.5 pints
Loam, silt loam, silt	1.25 - 2.0 pounds	1.5 - 2.0 pints
silty clay loam, sandy clay loam, silty clay, sandy clay, clay loam, clay	2.0 - 2.5 pounds	2 pints

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

Precautions: (1) Do not apply on sand or loamy sand soils or in areas where water is likely to "pond" over the bed, or crop injury may occur. (2) Do not apply broadcast to furrow planted cotton. (3) The use of FLO-MET 80 DF following the use of a systemic insecticide at planting may result in crop injury. (4) Do not use on Taloka silt loam or crop injury may occur.

TRIFLURALIN 4EC:

Use in a tank mixture with FLO-MET 80DF (all areas except Arizona and California) or before an overlay with FLO-MET 80DF in cotton for control of all weeds listed on both

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labels. For the tank mixture, follow soil preparation and incorporation procedures for Trifluralin 4EC. Apply FLO-MET 80DF + Trifluralin 4EC tank mix rates specified below in a minimum of 15 gallons of water per acre.

FLO-MET 80DF + Trifluralin 4EC Tank Mixture (except Arizona and California):

Broadcast Rates Per Acre		
SOIL TEXTURE	FLO-MET 80DF	Trifluralin 4EC
Sand, loamy sand, sandy loam*	1.25 pounds	1 pint
Loam, silty clay loam*, silt loam, silt, sandy clay loam*	2.0 pounds	1.5 pints
Clay, clay loam, silty clay loam*, silty clay, sandy clay, sandy clay loam*	2.5 pounds	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 FLO-MET 80DF as a preemergence soil surface treatment as recommended on this label at 1.25 to 2.5 pounds per acre after a preplant soil incorporated treatment of trifluralin. Apply Trifluralin 4EC as recommended on the 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 FLO-MET 80DF + 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 FLO-MET 80DF LABEL.

PROWL®:

Apply FLO-MET 80DF as a preemergence surface treatment as recommended on this label at 1.25 to 2.5 pounds 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 to 3 pints per acre. Refer to the Prowl® label for directions, precautions, and limitations for use of that product.

ZORIAL RAPID 80®:

Apply FLO-MET 80DF according to directions on this label as a preemergence soil surface treatment following a preplant incorporated application of Zorial Rapid 80® or tank mix with Zorial Rapid 80® and apply as a preemergence treatment. Refer to the Zorial Rapid 80® label for directions for use, precautions, and imitations for use of that

product.

DSMA OR MSMA:

FLO-MET 80DF 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 1.25 to 2.5 pounds 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 FLO-MET 80DF + DSMA or FLO-MET 80DF + 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

Zorial® Rapid 80 trademark of Sandoz Ltd.

CONDITIONS OF SALE AND WARRANTY

The Directions For Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of MICRO FLO COMPANY LLC ("Micro Flo") or the Seller. All such risks shall be assumed by the Buyer. Micro Flo warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use, subject to the inherent risks, referred to above. MICRO FLO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL MICRO FLO OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. Micro Flo and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing Conditions of Sale and Warranty which may be varied only by agreement in writing signed by a duly authorized representative of Micro Flo.