

MAR 23 1999

John S. Thornton
Bayer Corporation
P.O. Box 4913
Kansas City, MO 64120

Dear Mr. Thornton:

Subject: Amended Brand Name and Add Tank Mixture
Flufenacet DF Herbicide
EPA Registration No. 3125-487
Your Submission Dated March 5, 1999

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you:


1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

- Verify that Product named "DPX-E9636 25 DF" will be marketed. According to our computer records, the 25% product with this active ingredient is called Dupont Matrix Herbicide.

2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

A stamped copy of the labeling is enclosed for your records.

Sincerely yours,


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

Enclosure

487-9313.YLD

Base Pre-Reg (9313)

U.S. LABEL

Reason to Issue: To add additional tank-mix partners.

Date of Pre-Reg Draft: 02/18/99 (D)
Supersedes Pre-Reg Draft Dated: 06/04/98

FOE 5043 Flufenacet

DF Herbicide

For control of certain grass and broadleaf weeds in corn and soybeans.

ACTIVE INGREDIENT:

FLUFENACET: <i>N</i> -(4-Fluorophenyl)- <i>N</i> -(1-methylethyl)-2-[[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]oxy]acetamide	60.0%
INERT INGREDIENTS	40.0%
	100.0%

EPA Reg. No. 3125-487

EPA Est. 3125-MO-1

U.S. Patent No. 4,645,525 and 4,585,471 and 4,968,342

Net Weight: ___ Pounds

**ACCEPTED
with COMMENTS
In EPA Letter Dated:
MAR 23 1999**

**STOP - Read the label before use.
Keep out of reach of children.**

WARNING

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 3125-487

PRECAUTIONARY STATEMENTS DANGERS TO HUMANS AND DOMESTIC ANIMALS

WARNING: May be fatal if swallowed. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals. Avoid contact with skin, eyes, or clothing.

- Personal Protective Equipment:
Applicators and other handlers must wear:**
- Long-sleeved shirt and long pants
 - Waterproof gloves
 - Shoes plus socks.

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:

- User 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.

STATEMENTS OF PRACTICAL TREATMENT

If **swallowed**, vomiting should be induced. Administer water freely and induce vomiting by giving one dose (1/2 oz or 15 mL) of syrup of ipecac. If vomiting does not occur within 10 to 20 minutes, administer second dose. If syrup of ipecac is not available, induce vomiting by sticking finger down throat. Repeat until vomit fluid is clear. Never give anything by mouth to

an unconscious person. Professional medical assistance should be secured immediately. If **on skin**, wash thoroughly with soap and warm water.

To Physician: No specific antidote is available. Treat the patient symptomatically.

FOE 5043 DF

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 apply when weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwaters.

Do not allow sprays to drift onto adjacent desirable plants.

Ground Water: *N*-(4-Fluorophenyl)-*N*-(1-methylethyl)-2-[[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]oxy]acetamide is known to leach through soil into ground water under certain conditions as a result of use directions. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

Surface Water: *N*-(4-Fluorophenyl)-*N*-(1-methylethyl)-2-[[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]oxy]acetamide residues can contaminate surface water through spray drift. Under some conditions, they also have high potential for runoff into surface water (primarily via dissolution in runoff water or erosion), for several to many months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlying tile drainage systems that drain to surface waters.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS continued
involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours following application.

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

IMPORTANT: Read these entire Directions and Conditions of Sale before using FGE-5043 FLUFENACET Dry Flowable Herbicide.

CONDITIONS OF SALE OR OF DELIVERY FOR USE: THE DIRECTIONS ON THIS LABEL WERE DETERMINED THROUGH RESEARCH TO BE THE DIRECTIONS FOR CORRECT USE OF THIS PRODUCT. THIS PRODUCT HAS BEEN TESTED FOR A RANGE OF WEATHER CONDITIONS SIMILAR TO THOSE WEATHER CONDITIONS THAT ARE ORDINARY AND CUSTOMARY IN THE GEOGRAPHIC AREA WHERE THE PRODUCT IS USED. INSUFFICIENT CONTROL OF PESTS AND/OR INJURY TO THE CROP TO WHICH THE PRODUCT IS APPLIED MAY RESULT FROM THE OCCURRENCE OF EXTRAORDINARY OR UNUSUAL WEATHER, OR FROM FAILURE TO FOLLOW LABEL DIRECTIONS. IN ADDITION, FAILURE TO FOLLOW LABEL DIRECTIONS MAY CAUSE INJURY TO OTHER CROPS, ANIMALS, MAN, OR THE ENVIRONMENT. BAYER OFFERS, AND THE BUYER ACCEPTS AND USES, THIS PRODUCT SUBJECT TO THE CONDITIONS THAT EXTRAORDINARY OR UNUSUAL WEATHER, OR FAILURE TO FOLLOW LABEL DIRECTIONS ARE BEYOND THE CONTROL OF BAYER, AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

F0E-5043 Flufenacet DF Herbicide

GENERAL INFORMATION

F0E-5043 FLUFENACET is a selective herbicide for control of many annual grasses and certain broadleaf weeds in field corn, corn grown for silage and soybeans. **F0E-5043 FLUFENACET** may be applied preplant surface, preplant incorporated (mix into the top 1 to 2 inch layer of soil) and preemergence. **F0E-5043 FLUFENACET** will provide its most effective weed control when applied and subsequently moved into the soil by rainfall, sprinkler irrigation or mechanical tillage prior to weed emergence. **F0E-5043 FLUFENACET** controls weeds by interfering with seed germination and seedling development. **F0E-5043 FLUFENACET** may be applied using either water or

sprayable fluid fertilizer as a liquid carrier or be impregnated and applied on dry bulk fertilizer.

F0E-5043 FLUFENACET may be applied either alone or in tank mix combination with additional herbicides. When tank mixing, always observe all precautionary statements and limitations on labeling of all products.

Dry weather following preemergence application of **F0E-5043 FLUFENACET** or recommended tankmixtures may reduce effectiveness. Cultivate if weeds develop.

GENERAL USE RESTRICTIONS

F0E-5043 FLUFENACET is for use on soybeans, field corn or corn grown for silage. Do not use on popcorn, sweetcorn, whitecorn or corn grown for seed.

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

Do not use flood irrigation to apply, activate or incorporate **F0E-5043 FLUFENACET**.

Do not apply more than 21 ounces **F0E-5043 FLUFENACET** per acre per use season in corn and 12 ounces per acre per use season in soybeans.

Do not apply **F0E-5043 FLUFENACET** or **F0E-5043 FLUFENACET** tank mixtures when environmental conditions may favor drift to non-target sites.

Corn and soybean seed should be planted a minimum of 1 to 1-1/2 inches deep.

If any crop treated with **F0E-5043 FLUFENACET** is lost, corn or soybeans may be replanted immediately. Do not make a second application of **F0E-5043 FLUFENACET**.

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing / loading areas.

Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing / loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

This product must be used in a manner which will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

RATE SELECTION/SOIL TEXTURE

The recommended rates of **F0E-5043 FLUFENACET** are defined by texture and organic matter content of the soil being treated. Unless a specific soil texture is mentioned, rate tables throughout this label refer to the following three soil texture groups: coarse, medium and fine. If you are not

sure how to classify your soil, contact your Bayer Corporation representative, the Cooperative Extension Service or other knowledgeable person. The following chart includes a complete listing of soil textures included in each of the soil textures groupings:

F0E-5043 Flufenacet DF Herbicide

COARSE	MEDIUM	FINE
Sand Loamy sand Sandy loam	Loam Silt loam Silt Sandy clay loam Sandy clay	Silty clay loam Silty clay Clay loam Clay

MIXING INSTRUCTIONS

LIQUID CARRIERS:

F0E-5043 FLUFENACET is a dry flowable herbicide that must be mixed in water or sprayable fluid fertilizer. Compatibility of F0E-5043 FLUFENACET or its labeled tank mix products with these liquid carriers should always be predetermined prior to spraying. Refer to the SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST (Appendix I) of this label to determine product compatibility in fluid fertilizer carriers.

Before mixing F0E-5043 FLUFENACET and its labeled tank mixtures, examine the spray equipment making sure it is completely clean and free of rust or corrosion. Be sure the equipment is free of any residues from previously used pesticides. Flush lines with clean water or recommended detergents after the last application. Use an approved method for disposing of rinsate.

The proper mixing sequence for F0E-5043 FLUFENACET and recommended tank mixtures with the appropriate liquid carrier is as follows:

1. Fill the spray tank or nurse tank 1/4 full with the appropriate liquid carrier.
2. Start recirculation and agitation system and continue throughout mixing and application.
3. If the compatibility test indicates the need of a compatibility agent, add the recommended amount of compatibility agent to the spray tank.
4. If ammonium sulfate is to be used, add it now. Next add the recommended quantity of F0E-5043 FLUFENACET

[add directly if water or sprayable grade nitrogen fertilizers (28-0-0, 34-0-0) are the carriers; for other sprayable grade fertilizers first check compatibility and then either mix directly or pre-slurry in water depending in the results of the compatibility test].

5. If tank mixing with wettable powders or other dry flowable products, make a slurry of the products with water and add the slurry slowly to the spray tank.
6. If tank mixing with emulsifiable concentrates or soluble products, add the products to the spray tank.
7. If tank mixing with Gramoxone Extra®, a glyphosate-containing product or Touchdown®, add the products to the spray tank.
8. If mixing spray adjuvants in the mixture, add them after all other products have been mixed.
9. Fill the spray tank to the desired level with the appropriate liquid carrier.
10. Continue agitation during transport and application until the spray tank is empty. F0E-5043 FLUFENACET and all registered mixtures should be kept agitated once mixed and then sprayed immediately. Do not allow mixtures to stand for prolonged periods of time. Water quality, pH, temperature and/or other components of the mixture may affect how long the mixture may stand before application.

DRY FERTILIZER CARRIERS:

F0E-5043 FLUFENACET may be impregnated or coated on dry bulk fertilizers for application. Refer to Appendix II of this label for details.

APPLICATION INFORMATION

SPRAYER APPLICATION

Ground Broadcast Treatment: Accurately calibrate the sprayer prior to mixing the herbicide treatments. Apply F0E 5043 FLUFENACET and the labeled tank mixtures in a minimum of 10 gallons of total spray volume per acre using broadcast boom equipment. Use a pump with capacity to maintain 30 to 40 psi at the nozzles, maintain adequate in-tank agitation to keep the spray mixture in suspension and provide a minimum of 20% bypass at all times. Application must be made at a sufficient spray pressure and volume to provide accurate and uniform application of spray particles to a given area without causing spray drift to non-target areas. If mixed with other labeled herbicides, the spray volume may be no less than the minimum volume recommended by the tank mix product or 10 gallons, whichever is greater. The use of screens to protect the pump and nozzles is recommended. Screens placed on the

suction side of the pump should be 16-mesh or coarser. Do not place a screen in the recirculation line. Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles. Refer to the nozzle manufacturer for additional recommendations. Agitate thoroughly before and during application with either bypass or mechanical agitation. Rinse the sprayer thoroughly with clean water immediately after each use.

Band Treatment: F0E-5043 FLUFENACET and the labeled tank mixtures may be applied as a band treatment. Use the following formula to calculate the amount of herbicide needed for band treatments:

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \frac{\text{Broadcast rate}}{\text{per acre}} = \frac{\text{Band rate}}{\text{per acre}}$$

F0E-5043 Flufenacet DF Herbicide

DRY FERTILIZER APPLICATION

Apply using a minimum of 200 lb of dry fertilizer per acre.

See Appendix II for additional details.

APPLICATION METHODS AND TIMING

F0E-5043 FLUFENACET may be applied either alone or in tank mixtures with or sequentially with certain other registered and recommended herbicides. Applications may be made preplant surface, preplant incorporated or preemergence. F0E-5043 FLUFENACET may be used in either a single or split application program. Do not apply when environmental conditions favor drift.

Preplant Surface: For use in conservation, minimum or no-tillage crop production systems, F0E-5043 FLUFENACET alone or as a recommended tank mixture may be applied as a broadcast spray up to 45 days before planting in corn and 14 days before planting in soybeans. A sequential application is recommended for applications made 30 to 45 days prior to planting, where 2/3 of the highest recommended broadcast rate for the crop and soil texture is applied initially and the remaining 1/3 is applied at planting. Treatments made less than 30 days before planting may use either a single or sequential application. If weeds are present at the time of application, apply the F0E-5043 FLUFENACET treatment in tank mixture with a recommended nonselective herbicide such as Gramoxone Extra, a glyphosate-containing product or Touchdown. If possible, do not move treated soil out of the row or move untreated soil to the soil surface during planting, as weed control may be reduced.

Preplant Incorporation: Apply F0E-5043 FLUFENACET alone or in combination with recommended tank mixes as a broadcast spray and incorporate into the upper 1 to 2 inches of the soil surface up to 14 days before planting. Avoid deep incorporation since reduced weed control and/or crop injury may result. Incorporate with implements which provide uniform, shallow incorporation (example -finishing disk, harrow, rolling cultivator, etc.)

Preemergence: F0E-5043 FLUFENACET alone and its recommended tank mixes may be applied to the soil surface as a broadcast spray or band application after planting of the crop but prior to weed or crop emergence. If weeds are present at the time of application, apply F0E-5043 FLUFENACET with a nonselective herbicide such as Gramoxone Extra, a glyphosate-containing product or Touchdown. Rainfall and/or overhead sprinkler irrigation is necessary to move F0E-5043 FLUFENACET into the upper soil surface where weed seeds germinate. Dry weather conditions following application may reduce weed control. If adequate moisture is not received within 7 to 10 days after applications and weeds begin to emerge from the soil, a light rotary hoeing or shallow incorporation (no deeper than 1/2 inch deep) will improve performance and minimize crop damage. Excessive rainfall or irrigation after application may reduce weed control.

CORN

F0E-5043 FLUFENACET dry flowable herbicide is a selective herbicide for control of most annual grasses and selected annual broadleaf weeds in field corn or corn grown for silage. A single or split application program may be used and the product may be applied alone or in tank-mix combination with certain registered herbicides. The following

types of applications are allowed: preplant surface, preplant incorporate and preemergence. Most effective weed control will occur when the applied product is moved into the soil by rainfall, sprinkler irrigation or mechanical tillage prior to weed emergence from the soil.

WEED SPECIES CONTROLLED BY F0E-5043 FLUFENACET

F0E-5043 FLUFENACET herbicide applied at recommended dosages and application timings will control many important annual grasses and broadleaf weeds.

WEEDS CONTROLLED ¹			
ANNUAL GRASS WEEDS		ANNUAL BROADLEAF WEEDS	
Barnyardgrass (<i>Echinochloa crusgalli</i>)	Foxtail, green (<i>Setaria viridis</i>)	Panicum, browntop (<i>Panicum fasciculatum</i>)	Carpetweed (<i>Mullugo verticillata</i>)
Crabgrass, large (<i>Digitaria sanguinalis</i>)	Foxtail, yellow (<i>Setaria glauca</i>)	Panicum, fall (<i>Panicum dichotomiflorum</i>)	Purslane, common (<i>Portulaca oleracea</i>)
Crabgrass, smooth (<i>Digitaria ischaemum</i>)	Goosegrass (<i>Eleusine indica</i>)	Signalgrass, broadleaf (<i>Brachiaria platyphylla</i>)	Pusley, Florida (<i>Richardia scabra</i>)
Foxtail, giant (<i>Setaria faberi</i>)	Johnsongrass (seedling) (<i>Sorghum halepense</i>)	Witchgrass (<i>Panicum capillare</i>)	Spurge, spotted (<i>Euphorbia maculata</i>)
	Lovegrass, India (<i>Eragrostis</i> sp)		

WEED SPECIES PARTIALLY CONTROLLED BY F0E-5043 FLUFENACET

F0E-5043 FLUFENACET herbicide will provide partial control or reduced competition for many additional grass and broadleaf weeds. Reduced competition weeds will be stunted in growth and/or be of reduced populations as compared to non-treated areas but control will generally not be commercially acceptable.

WEED SPECIES PARTIALLY CONTROLLED	
ANNUAL GRASS/SEDGE WEEDS	ANNUAL BROADLEAF WEEDS
Cupgrass, woolly (<i>Eriochloa villosa</i>)	Beggarweed, Florida (<i>Desmodium tortuosum</i>)
Millet, wild-proso (<i>Panicum miliaceum</i>)	Lambsquarters, common (<i>Chenopodium album</i>)
Nutsedge, yellow (<i>Cyperus esculentus</i>)	Mustard spp. (<i>Brassica spp.</i>)
Panicum, Texas (<i>Panicum texanum</i>)	Nightshade, eastern black (<i>Solanum ptycanthum</i>)
Sandbur, field (<i>Cenchrus incertus</i>)	Pigweed spp. (<i>Amaranthus spp.</i>)
Shattercane (<i>Sorghum bicolor</i>)	Ragweed, common (<i>Ambrosia artemisiifolia</i>)
	Sida, prickly (<i>Sida spinosa</i>)
	Waterhemp, common (<i>Amaranthus rudis</i>)
	Waterhemp, tall (<i>Amaranthus tuberculatus</i>)

F0E-5043 FLUFENACET USE RATES IN PREPLANT SURFACE, PREPLANT INCORPORATED AND PREEMERGENCE APPLICATIONS

For **CONVENTIONAL Tillage Systems With Applications Made TWO WEEKS OR LESS** Preplant Surface, Preplant Incorporated or Preemergence:

Recommended F0E-5043 FLUFENACET use rates are located in Table 1.

Rates are based on soil texture and organic matter and are for applications made within two weeks of planting and until corn emergence.

TABLE 1

F0E-5043 <u>FLUFENACET</u> USE RATES IN CONVENTIONAL TILLAGE APPLICATIONS MADE TWO WEEKS OR LESS PREPLANT SURFACE, PREPLANT INCORPORATED OR PREEMERGENCE.		
F0E-5043-DF <u>FLUFENACET</u> RATE (OUNCES PER ACRE). ^{1,2}		
SOIL TEXTURAL GROUP ³	SOIL ORGANIC MATTER CONTENT	
	Less than 3%	3% or More
COARSE	12 oz	14 oz
MEDIUM	14 to 16 oz	16 to 18 oz
FINE	18 to 20 oz	18 to 21 oz

¹ Use the higher rate of F0E-5043 FLUFENACET within the applicable rate range under any of the following conditions: heavy surface plant residues, heavy weed pressure and/or when soil organic matter is at the upper end of the range.
² Not recommended for use on peat or muck soils (soils with 20% or more organic matter).
³ For more information, refer to the "Rate Selection/Soil Texture" section of this label.

For **CONSERVATION, MINIMUM, and NO-TILLAGE Systems; or CONVENTIONAL Tillage Systems With Applications GREATER THAN TWO WEEKS** Preplant: Recommended F0E-5043 FLUFENACET use rates are located in Table 2. Rates are higher for these types of tillage systems and application timings than in Table 1 due to the extended period of weed control needed and the increased crop residue present. Refer to the "Application Methods and

Timing" section of the label for details. Weed control will generally be greater the closer the applications are made to planting but prior to weed emergence. If weeds are present at application, a nonselective herbicide such as or Gramoxone Extra, a glyphosate-containing product or Touchdown used at recommended rates may be mixed with F0E-5043 FLUFENACET treatments.

FOE 5043 Flufenacet DF Herbicide

TABLE 2

FOE 5043 FLUFENACET USE RATES IN CONSERVATION, MINIMUM, AND NO-TILLAGE SYSTEMS; OR CONVENTIONAL TILLAGE SYSTEMS WITH APPLICATIONS GREATER THAN TWO WEEKS PREPLANT SURFACE. FOE 5043 DF FLUFENACET RATES (OUNCES PER ACRE). ^{1,2}		
SOIL TEXTURE GROUP ³	SOIL ORGANIC MATTER CONTENT	
	Less than 3%	3% or More
COARSE	13 oz	15 oz
MEDIUM	16 to 18 oz	18 to 20 oz
FINE	20 to 21 oz	20 to 21 oz

¹ Use the higher rate of FOE 5043 FLUFENACET within the applicable rate range under any of the following conditions: heavy surface plant residues, heavy wheel pressure and/or when soil organic matter is at the upper end of the range.
² Not recommended for use on peat or muck soils (soils with 20% or more organic matter).
³ For more information, refer to the "Rate Selection/Soil Texture" section of this label.

FOE 5043 FLUFENACET TANK MIXTURES

FOE 5043 FLUFENACET may be applied in tank mixture with certain herbicides to improve control of broadleaf weeds such as velvetleaf, common cocklebur and morningglory species. Mixtures may be used in either conventional, conservation, minimum and no-tillage systems. They may be applied with similar timings and methods as FOE 5043 FLUFENACET alone unless specifically prohibited in the mix partner's product label. Three-way or multiple tank mixtures are permitted unless restricted by the product label. Refer to the individual product labels for recommended use rates, precautions and/or restrictions.

Herbicides recommended for tank mixtures with FOE 5043 FLUFENACET include:

- | | |
|------------------------|-----------------|
| Atrazine | Prowl® |
| Bladex® | Marksman® |
| Banvel® | Eradicane® |
| Clarity® | Gramoxone Extra |
| <u>DPX-E9636 25 DF</u> | Roundup |
| Extrazine II® | Roundup Ultra® |
| Glyphosate | 2,4-D LVE |
| Hornet® | Sencor® |
| Pentagon® | Touchdown |
- Depend on mixture*
Herbicide

FOE 5043 FLUFENACET SEQUENTIAL APPLICATIONS

Sequential herbicide applications either before or following FOE 5043 FLUFENACET treatments may be used to control additional

weeds. Herbicides recommended for sequential applications include:

- | | | | | | |
|------------|----------------------|--------------|-----------------|-----------|---------------|
| Atrazine | Beacon® | Buctril Gel® | Gramoxone Extra | Poast® | Roundup Ultra |
| Accent® | Bladex | Clarity | Hornet | Prowl | Scorpion III® |
| Banvel | Bromoxynil | Contour® | Laddok S-12® | Pursuit® | Sencor |
| Basagran® | Bromoxynil +Atrazine | Exceed® | Liberty® | Resolve® | Touchdown |
| Basis® | Buctril® | Extrazine II | Marksman® | Resource® | Tough® |
| Battalion® | Buctril + Atrazine® | Glyphosate | Permit® | Roundup | 2,4-D |

SOYBEAN

FOE 5043 FLUFENACET is a selective herbicide for control/suppression of most annual grasses in soybeans. FOE 5043 FLUFENACET may be applied once per use season either alone, in tank mix combination with or sequentially with certain registered herbicides. The following types of application are allowed: preplant surface, preplant incorporated and preemergence. The preplant surface and

preplant incorporated treatments may be applied up to 14 days before planting. The most effective weed control will occur when the applied product is moved into the soil by rainfall, sprinkler irrigation or mechanical tillage prior to weed emergence from the soil.

Do not graze or feed forage, hay or straw to livestock.

WEED SPECIES CONTROLLED BY FOE 5043 FLUFENACET

FOE 5043 FLUFENACET herbicide applied alone at the recommended dosages and application timings will provide control of certain annual grasses.

WEEDS CONTROLLED ¹ ANNUAL GRASS WEEDS	
Barnyardgrass (<i>Echinochloa crusgalli</i>)	Foxtail, yellow (<i>Setaria glauca</i>)
Crabgrass, large (<i>Digitaria sanguinalis</i>)	Goosegrass (<i>Eleusine indica</i>)
Crabgrass, smooth (<i>Digitaria ischaemum</i>)	Lovegrass, India (<i>Eragrostis sp</i>)
Foxtail, giant (<i>Setaria faberi</i>)	Panicum, fall (<i>Panicum dichotomiflorum</i>)
Foxtail, green (<i>Setaria viridis</i>)	
¹ Full season weed control will be achieved only on coarse textured soils using the maximum 12 ounce use rate. Use rates of 7 to 12 ounces will provide only early season weed control on all other soil textures. To complement early season weed control, <u>AXIOM FLUFENACET</u> recommended for use in tank-mixture with or sequentially with other herbicides that provide additional control of these weed species.	

WEED SPECIES PARTIALLY CONTROLLED BY FOE 5043 FLUFENACET

FOE 5043 FLUFENACET Herbicide will provide partial control or reduced competition for additional annual grasses. Reduced competition weeds will be stunted in growth and/or be of reduced populations as compared to non-treated areas but control will generally not be commercially acceptable.

WEED SPECIES PARTIALLY CONTROLLED ANNUAL GRASS WEEDS	
Johnsongrass, seedling (<i>Sorghum halepense</i>)	Signalgrass, broadleaf (<i>Brachiaria platyphylla</i>)
Panicum, browntop (<i>Panicum fasciculatum</i>)	Shattercane (<i>Sorghum bicolor</i>)
Sandbur, field (<i>Cenchrus incertus</i>)	Witchgrass (<i>Panicum capillare</i>)

FOE 5043 FLUFENACET USE RATES

The recommended use rates for FOE 5043 FLUFENACET applied alone, in tank mix combination with and/or sequentially with other herbicides for all application methods and timings is **7 to 12 ounces** per acre. The 12 ounce rate of FOE 5043 FLUFENACET will provide full season control of annual grasses in coarse textured soils but will provide

only early season weed control on medium and fine textured soils. Rates lower than 12 ounces will provide **only** early season weed control on all soil textures. To complement this early season weed control, FOE 5043 FLUFENACET should be used in tank-mixture or sequentially with other herbicides that provide additional control of these weed species.

FOE 5043 FLUFENACET TANK MIXTURES

FOE 5043 FLUFENACET may be applied in tank mixture with certain herbicides to improve control of annual grasses and/or broadleaf weeds such as velvetleaf, common cocklebur and morningglory species. Mixtures may be used in either conventional, conservation, minimum and no-tillage systems. They may be applied with similar timings and methods as FOE 5043 FLUFENACET alone unless

specifically prohibited in the mix partner product label. Three-way or multiple tank mixtures are permitted unless restricted by the mix partner product labels. Refer to the individual product labels for recommended use rates, precautions and/or restrictions. Herbicides recommended for tank mixtures with FOE 5043 FLUFENACET include:

Authority Broadleaf®	FirstRate®	Pentagon	Roundup Ultra	Touchdown®
Canopy®	Glyphosate	Prowl	Scepter®	Trifluralin
Canopy XL®	Gramoxone Extra	Pursuit	Sencor (Metribuzin)	Turbo®
<u>Clorimuron-ethyl DF</u>	Linuron (Lorox® and others)	Roundup	Sonolan HFP®	2,4-D LVE
Command®				

F0E-5043 Flufenacet DF Herbicide

F0E-5043 FLUFENACET SEQUENTIAL APPLICATIONS

Sequential herbicide applications may be used in a F0E 5043 FLUFENACET weed control program to control additional weeds. Herbicides recommended for use either

before or following F0E-5043 FLUFENACET treatments include:

Table listing various herbicides such as Assure II, Basagran, Blazer, Canopy, Classic, Cobra, Command, Concert, FirstRate, Flexstar, Fusilade, Fusion, Galaxy, Glyphosate, Gramoxone Extra, Liberty, Linuron, Option II, Pentagon, Pinnacle, Poast, Poast Plus, Prowl, Pursuit, Raptor, Reflex, Reliance STS, Resource, Roundup, Roundup Ultra, Scepter, Select, Sencor, Sonalan HFP, Storm, Synchrony STS, Tornado, Touchdown, Trifluralin, and 2,4-D.

Refer to the above information and the individual product labels to for use directions, use rates and special precautions/restrictions.

CORN AND SOYBEAN CROP ROTATION RECOMMENDATIONS

In the event of a crop failure any crop on this label can be replanted immediately. Do not make a second application of F0E-5043 FLUFENACET. Do not graze or feed to livestock the forage or fodder of cotton planted 5 months after an F0E-5043 FLUFENACET application.

Waiting period after F0E-5043 FLUFENACET herbicide application before the following crops can be planted.

Table with columns: Immediately, 1 month, 4 months, 12 months. Lists crops like Corn, Soybean, Potato, Cabbage, Peppers, Carrots, Radish, Cotton, Sugar beets, Lettuce, Alfalfa, Bromegrass, Barley, Buckwheat, Bermudagrass, Clover, Bluegrass, Fescue, Millet, pear, Millet, proso, Oats, Popcorn, Rice, Rye, Sorghum, Teosinte, Trical, Wheat, Wild Rice, and all other crops.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed below. In

spill or leak incidents, keep unauthorized people away. You may contact the Bayer Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer Kansas City Emergency Response Telephone No. is 800-414-0244 or contact Chemtrec at 800-424-9300.

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

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.



APPENDIX I

SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST

A compatibility test is highly recommended for all applications with liquid fertilizers. Prior to mixing products in the spray tank, small quantities of each product can be mixed in proportionate quantities to evaluate compatibilities. The following test assumes a spray volume of 25 gallons per acre. If other spray volumes are to be used, adjust the appropriate amounts of ingredients. To check for compatibility, use the following procedure:

1. Add two inches of water to a one-quart jar fitted with a tight lid.
2. Add the appropriate amount of herbicide. If more than one product is used, the recommended mix sequence is the dry herbicide first, flowables next and emulsified concentrates last. For dry herbicides, add 1-1/2 level teaspoons/pound/acre use rate and for liquids add 1/2 teaspoon/pint/acre use rate.
3. Add one pint of the liquid fertilizer to the jar. Place the

lid on the jar and gently shake the jar for one minute. Place the jar on a level surface and let it stand for 30 minutes.

4. Observe the mixture for signs of separation, flakes, gels, precipitates, etc. If none of these conditions occur, the mix is compatible.
5. If incompatible, use of a compatibility agent is recommended. Rerun the above test but first add a compatibility agent (1/4 teaspoon is equal to a use rate of 2 pints/100 gallons spray mix) and gently shake the jar prior to adding herbicides.
6. If the mixture is now compatible, a compatibility agent should be used in the spray mixture at its recommended rate.
7. If the mixture is still incompatible, the liquid fertilizer and herbicides should not be mixed together for use in the same spray tank.

APPENDIX II

IMPREGNATION AND APPLICATION ON DRY FERTILIZER

Dry bulk fertilizer may be impregnated or coated with F0E 5043 FLUFENACET for applications to corn and soybeans. Follow all F0E-5043 FLUFENACET label recommendations, special instructions and precautions. All state regulations relating to dry bulk fertilizer blending, impregnating and labeling must also be followed.

Rates: Select the recommended F0E-5043 FLUFENACET use rate per acre from the crop section of this label and determine the quantity of dry bulk fertilizer to be applied per acre (use a minimum of 200 pounds and a maximum of 450 pounds per acre). Use the equation below to determine the amount of F0E-5043 FLUFENACET needed per ton of fertilizer applied.

$$\frac{\text{lbs F0E-5043 FLUFENACET}}{\text{per acre}} \times \frac{2000 \text{ lbs Fertilizer}}{\text{per acre}} = \frac{\text{lbs F0E-5043 FLUFENACET}}{\text{per ton fertilizer}}$$

(1 lb = 16 ounces F0E-5043 FLUFENACET)

Impregnation: F0E-5043 FLUFENACET may be impregnated on many commonly used dry fertilizers but should not be impregnated on ammonium nitrate, fertilizers containing ammonium nitrate, potassium nitrate, sodium nitrate or powder limestone.

To impregnate F0E-5043 FLUFENACET on bulk fertilizer, use a closed rotary-drum mixer or other commonly used dry bulk fertilizer blender equipped with suitable spray equipment. Mix F0E-5043 FLUFENACET with sufficient water to form a sprayable slurry mixture. Spray nozzles must be directed to provide uniform fertilizer coverage while avoiding spray contact with mixing equipment. Nonuniform impregnation can cause crop injury or unsatisfactory performance.

Spray the herbicide mixture onto the fertilizer after blending has started. If necessary, include a suitable drying agent to ensure a spreadable herbicide impregnated fertilizer. If the fertilizer materials are excessively dusty, use diesel fuel or other suitable additive to reduce dust prior to impregnation. Apply the treated fertilizer immediately after impregnation to avoid lump formation and spreading difficulties.

Application. Accurate calibration of fertilizer application equipment and uniform fertilizer distribution is essential for satisfactory weed control. Air flow or auger metered application equipment is preferred (one pass application). If other equipment is used, the recommended application method is to apply one-half the recommended rate and overlap 50 percent or to double apply by splitting the middles to obtain the best distribution pattern.

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