

US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (75-767) WASHINGTON, DC 20460	EPA REGISTRATION NO. 56479-2	DATE OF ISSUANCE JUL 23 1987
	TERM OF ISSUANCE Conditional	
	NAME OF PESTICIDE PRODUCT Eplilucor Five EC	

NOTICE OF PESTICIDE: REGISTRATION
 REREГИSTRATION
 (Under the Federal Insecticide, Fungicide,
 and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

MPH Handels AG
 Burgstrasse 26
 CH-6750 Glarus
 Switzerland

BEST AVAILABLE COPY

NOTE: Changes in labeling formula 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 in commerce. In any correspondence on this product always refer to the above U.S. 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.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his 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.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment.
 - a. Add the phrase "EPA Registration No. 56479-2."
 - b. Change the ENVIRONMENTAL HAZARD statement to read as follows:

This pesticide is toxic to fish. Do not apply directly to water or wetlands (swamps, bogs, or marshes). Drift or runoff from treatment areas may be hazardous to aquatic organisms in neighboring aquatic sites. Do not contaminate water by cleaning of equipment or disposal of waste.
 - c. The acute toxicity data submitted in April 1987 (EPA Reg. 401644-01 through -06) are adequate, but the correct signal word for this formulation is HARMFUL based on the primary skin irritation study. Change the signal word CAUTION to WARNING wherever it is used on the label.

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE
JUL 23 1987

- d. Under the directions for applying this pesticide with liquid fertilizers, add a list of compatibility agents. Specify compatibility agents cleared for application to growing crops.
- e. Under the fall application directions for cotton (Ipifluor alone), note that the use is limited to the southeastern Missouri bootheel, and add the following States: New Mexico, Oklahoma, and South Carolina.
- f. Under Special Application to Cotton (Ipifluor alone), specify that use along the Texas Gulf Coast is limited to the following counties: Brazoria, Calhoun, Chambers, Fort Bend, Galveston, Harris, Jackson, Jefferson, Liberty, Matagorda, Orange, Victoria, Waller, and Wharton.
- g. For the Ipifluor/Caparol 80W tank mix for cotton, note that the qualifying statement "Do not use on sand and loamy sand soils" applies only to the 2-pound recommended rate of Caparol on coarse soils. The qualifying statement should also be expanded to state that for hand applications, the user should use proportionally less.
- h. For the Ipifluor/Cotoran tank mix for cotton, make the following modification:
 - Under the use directions for Cotoran overlay, specify that the lower recommended application rate should be used on light soil and sandy soils low in organic matter.
- i. For the Ipifluor/Karmex overlay directions for cotton, note that the use is limited to Eastern Texas.
- j. Under the use directions for cucurbits, specify more prominently that the use is limited to the Western United States, including Texas.
- k. Modify the precautionary text for the Ipifluor/Avadex tank mix on peas to warn against grazing livestock on treated crops.
- l. Under the use directions for soybeans, special applications of Ipifluor alone, make the following modifications:
 - 1) Specify the counties where the product may be used in the Texas Gulf Coast (see f above).
 - 2) In the directions for control of Rhizome Johnsongrass in the Eastern United States note that the application may be made in spring or fall or as a split application.

2/3/39

- m. Under the use directions for sugar beets, special application, add Kansas to the list of States where application is permitted.
 - n. Under the use directions for sugarcane, specify that the Plant cane directions are limited to use in the Eastern United States only.
 - o. Under the use directions for trees and vineyards, make the following modifications:
 - 1) Add the following precautionary statement for use directions in the Eastern and Western United States: "If crops are planted between the trees or vines, label directions for those specific crops apply to the area which is interplanted."
 - 2) Under the Rhizome Johnsongrass directions, add the following precautionary statement: "Do not apply to vineyards within 6 months of harvest."
 - p. Under the use directions for wheat, we do not understand the Fall Application directions. Do you intend these directions to apply to wheat only, or are they meant to be general Fall Application directions? Trifluralin labels do not contain Fall Application directions for wheat.
 - q. Under Special Precautions, add Oklahoma and South Dakota to the list of States where at least 25 inches of irrigation or rainfall was used to produce the crop.
 - r. The name and address of the registrant, producer, or firm for which the pesticide was produced must appear on the label.
3. Submit one (1) copy of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 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.

Richard F. Mountfort *RFM*
 Product Manager (23)
 Fungicide-Herbicide Branch
 Registration Division (TS-767C)

Enclosure

56479-E
D. 4/39

ACCEPTED
with comment
JUL 23 1987
EPA Reg. No. 56479-2

L U O R FIVE EC

EMULSIFIABLE CONCENTRATE

SELECTIVE HERBICIDE

FOR THE PRE-EMERGENCE CONTROL OF ANNUAL GRASSES AND BROADLEAF WEEDS

ACTIVE INGREDIENT		
d,d,d-trifluoro-2,6-dinitro-N,N-dipropyl-p-toluidine	50.8%	50.78 ✓
INERT INGREDIENTS	49.2%	
	TOTAL	100.0%

Contains 5 pounds of active ingredient per gallon.

CAUTION *Warning*

KEEP OUT OF REACH OF CHILDREN

SEE BACK OF CONTAINER FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA Est.No. ✓

EPA Reg.No. ✓

NET CONTENTS:

RECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

1471-120
10163-99

CAUTION *Warning*

Harmful if swallowed, inhaled or absorbed through the skin. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. When handling or applying, wear protective clothing such as goggles or face shield and rubber gloves. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes.

PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flame.

STATEMENT OF PRACTICAL TREATMENT

If swallowed: Call a physician. 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.

If inhaled: Remove victim to fresh air. Get medical attention.

If in eyes: Immediately flush with plenty of water. Get medical attention.

If on skin: Wash with plenty of soap and water. Get medical attention.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Refer to Technical Bulletin for Use of IPIFLUOR FIVE EC and read all directions carefully before applying.

STORAGE AND DISPOSAL

Storage.

Avoid freezing. Store above 40 F. If frozen, poor weed control may result. Do not store near heat or flame.

Pesticide Disposal.

Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal.

Do not reuse empty containers. 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.

TECHNICAL BULLETIN
FOR USE OF
I P I F L U O R FIVE EC

INDEX

Precautionary statement	3
General information	
- Weeds and grasses controlled	4
- Soil preparation	7
- Soil texture	8
Application directions	
- Ground application	8
- Aerial application	8
- Incorporation	8
- Application with liquid fertilizers	9
- Application with dry bulk fertilizers	10
Directions for use	
- Alfalfa	11
- Asparagus	11
- Beans	12
(Dry, Castor, Guar, Mungbeans, Lima, Snap)	
- Carrots	13
- Celery	14
- Cole crops	14
(Broccoli, Brusselsprouts, Cabbage, Cauliflowers)	
- Cotton	15
- Cucurbits	18
(Cantaloupes, Cucumbers, Watermelons)	
- Greens	18
(Turnipgreens, Kale, Mustardgreens)	
- Hops	18
- Mint	19
- Okra	19
- Peanuts	19
- Peas	19
(English, Dry, Southern Peas)	
- Peppers	20
- Potatoes	21
- Safflower	22
- Soybean	23
- Sugarbeets	29
- Sugarcane	29
- Sunflower	30
- Tomatoes	31
- Trees and Vineyards	32
- Wheat	34
(Winter, Spring, Durum, Barley)	
Special precautions	34
Notice of Warranty	35

PRECAUTIONARY STATEMENTS (

3. 1/8/89

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION *Washing?*

Harmful if swallowed, inhaled or absorbed through the skin. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. When handling or applying, wear protective clothing such as goggles or face shield and rubber gloves. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes.

PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flame.

STATEMENT OF PRACTICAL TREATMENT

If swallowed: Call a physician. 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.

If inhaled: Remove victim to fresh air. Get medical attention.

If in eyes: Immediately flush with plenty of water. Get medical attention.

If on skin: Wash with plenty of soap and water. Get medical attention.

DIRECTIONS FOR USE

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

STORAGE AND DISPOSAL

Storage.

Avoid freezing. Store above 40 F. If frozen, poor weed control may result. Do not store near heat or flame.

Pesticide Disposal.

Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal.

Do not reuse empty containers. 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.

GENERAL INFORMATION

IPIFLUOR FIVE EC is a pre-emergence herbicide which is incorporated into the soil to provide long-lasting control of annual grasses and broadleaf weeds; it controls weeds by killing their seeds as they germinate. It does not control established weeds. Incorporation of IPIFLUOR FIVE EC assures effective control regardless of weather conditions and permits shallow cultivation, rotary hoeing and hand hoeing without reducing its weed control activity.

WEEDS AND GRASSES CONTROLLED

GRASSES		BROADLEAF WEEDS	
Annual bluegrass	Poa Annua	Carpetweed	Mollugo verticillata
Barnyardgrass (Watergrass)	Echinochloa sp.	Chickweed	Stellaria media
Brachiaria (Signalgrass)	Brachiaria sp.	Field Bindweed	Convolvulus arvensis
Bromegrass (Cheatgrass-Downy brome)	Bromus tectorum	Florida pusley (Florida purslane- Mexican clover- Pusley)	Richardia scabria
Cheat (Chess)	Bromus secalinus	Goosefoot	Chenopodium hybridum
Crabgrass (Large crabgrass- Smooth crabgrass)	Digitaria sp.	Henbit	Lamium amplexicale
Fall panicum	Panicum dichotom.	Knotweed	Polygonum aviculare
Foxtails (Bottlegrass- Bristlegrass- Giant foxtail- Green foxtail- Pigeongrass- Robust foxtail- Yellow foxtail)	Setaria sp.	Kochia (Fireweed)	Kochia Scoparia
Goosegrass (Silver crabgrass- Silvergrass- Wiregrass Yardgrass)	Eleusine indica	Lambsquarters	Chenopodium album
Guineagrass	Panicum maximum	Pigweeds (Carelessweed- Prosprate pig weed-Redroot- Rough pigweed- Spiny pigweed)	Amaranthus sp.
Johnsongrass (Seedling and Rhizome)	Sorghum halepense	Puncturevine (Caltrop)	Tribulus terrestris
Junglerice	Echinochloa col.	Purslane	Portulaca oleracea
Raoulgrass (Itchgrass)	Rottboelia exalt.	Russian thistle (Tumbleweed)	Salsola kali
		Stinging nettle (Nettle)	Irtica dioica

Sandbur (Burgrass)	Cenchrus incertus	
Sprangletop	Leptochloa filifor	
Stinkgrass (Lovegrass)	Eragrostis cilian.	
Texas panicum (Buffalograss- Coloradograss)	Panicum texano	
Wild cane (Shattercane)	Sorghum bicolor	

IPIFLUOR FIVE EC will not control certain resistant weeds such as Cocklebur, Jimsonweed, Ragweed, Velvetleaf, Nutsedge.

IPIFLUOR FIVE EC , in mixture with other products, will control the following additional weeds:

IPIFLUOR FIVE EC/SENCOR^R OR LEXONE^R TANK-MIX
(see Soybean section for instructions)

In soybean:

Jimsonweed	Datura stramonium
Mallow, Venice (Flower-of-an-hour)	Hibiscum trionum
Mustard, wild (Charlock- Field mustard)	Brassica kaber
Ragweed, common	Ambrosia artemisifolia
Sesbania, hemp (Coffeebean- Indigo)	Sesbania exaltata
Smartweed, annual (Pennsylvania smartweed- Smartweed)	Polygonum pensylvanicum
Prickly sida (Teaweed- Spiny sida)	Sida spinosa
Velvetleaf (Butterprint- Buttonweed- Cottonweed- Elephant's ear- Indian mallow- Piermarker)	Abutilon theophrasti

Control of Cocklebur, Morning glory and Giant Ragweed may be erratic ranging from poor to excellent depending upon soil temperature, time of weed germination, depth of weed seed in the soil and amount and timing of soil moisture. Control may be improved with timely cultivation.

IPIFLUOR FIVE EC /EPTAM^R TANK-MIX
(see Drybean section for instructions)

In drybean and potato:

Henbit	Lamium amplexicale
Nightshade, black	Solanum nigrum
Nightshade, hairy	Solanum sarachoides
Nutsedge	Cyperus sp.
(Nutgrass- Purple nutsedge- Yellow nutsedge)	
Wild oat	Avena fatua

IPIFLUOR FIVE EC /AMIBEN^R TANK-MIX AND OVERLAY
(see Soybean and sunflower sections for instructions)

In soybean and sunflower:

Coffeeweed	Sesbania exaltata
Mustard; wild	Brassica kaber
Nightshade, black	Solanum nigrum
Prickly sida	Sida spinosa
(Teaweed)	
Ragweed, common	Ambrosia artemisifolia
Spurge, annual	Euphorbia maculata
Smartweed, pennsylvania	Polygonum pennsylvanicum
Stinkgrass	Eragrostis cilianensis
Velvetleaf	Abutilon theophrasti
(Buttonweed)	

IPIFLUOR FIVE EC /CAPAROL^R TANK-MIX
(see Cotton section for instructions)

In cotton:

Smartweed	Polygonum pennsylvanicum
Prickly sida	Sida spinosa
(Teaweed)	
Annual morning glory	Convolvulus
Ragweed, common	Ambrosia artemisifolia
Groundcherry, annual	
Mustard, wild	Brassica kaber
Malva	
Wild oat	Avena fatua

The tank-mix also controls shallow germinating seedlings of Cocklebur and Coffee weed.

IPIFLUOR FIVE EC /COTORAN^R TANK-MIX OR OVERLAY
(see Cotton section for instructions)

In cotton:

Buttonweed	Abutilon theophrasti
Cocklebur	Xanthium strumarium
Goathead	
Grouncherry, annual	
Jimsonweed	Datura stramonium
Morning glory, annual	Convolvulus
Prickly sida	Sida spinosa
Ragweed	Ambrosia artemisifolia
Ryegrass	Lolium
Sesbania	Sesbania
Sicklepod	Cassia obtusifolia
Smartweed	Polygonum pennsylvanicum
Tumbleweed	Amaranthus albus

IPIFLUOR FIVE EC PREPLANT FOLLOWED BY KARMEX^R OVERLAY
(see Cotton section for instructions)

In cotton:

Dogfennel	Eupatorium capillifolium
Groundcherry, annual	
Morning glory, annual	Convolvulus
Pennycress	Thlaspi sp.
Ragweed	Ambrosia artemisifolia
Sheperdspurse	Capsella bursa pastoris
Velvetgrass	Hulcus lanatus
Wild lettuce	Lactuca sp.
Wild mustrad	Brassica kaber

IPIFLUOR FIVE EC /VERNAM^R TANK-MIX
(see Soybean and Peanut sections for instructions)

In soybean and peanut:

Morning glory, annual	Convolvulus
Coffeeweed	Sesbania exaltata
Purple nutsedge	Cyperus rotundus
Yellow nutsedge	Cyperus esculentus
Velvetleaf	Abutilon theophrasti

IPIFLUOR FIVE EC /VADEX^R TANK-MIX
(see Peas and Wheat sections for instructions)

In peas, spring wheat and barley:

Wild oat	Avena fatua
----------	-------------

SOIL PREPARATION

A good soil preparation is essential for best results: destroy existing weeds before herbicide application. Chop and thoroughly mix crop residues into the soil to a depth of at least 4 to 6 inches by deep plowing or discing before application. Use machinery that breaks up large clods.

SOIL TEXTURE

Before application determine soil texture in order to apply the correct rate. Rates given in this booklet refer to the following soil texture groups:

Coarse soils: sand, loamy sand, sandy loam

Medium soils: loam, silty clay loam, silt loam, silt, sandy clay loam

Fine soils : clay, clay loam, silty clay loam, silty clay, sandy clay, sandy clay loam.

Silty clay loam and sandy clay loam soils are transitional soils and may be classified as either medium or fine textured soils. If silty clay loam or sandy clay loam soils are predominantly sand or silt, they are usually classified as medium textured soils. If they are predominantly clay, they are usually classified as fine textured soils.

APPLICATION DIRECTIONS

IPIFLUOR FIVE EC is an emulsifiable concentrate which must be mixed with water and applied as a spray before or in the same operation as soil incorporation.

GROUND APPLICATION

Apply in 5 to 40 gallons of water/acre (broadcast basis) using any properly calibrated low-pressure sprayer that will uniformly apply the spray. Pour the recommended amount of product into the spray tank during the filling operation and mix thoroughly before spraying. As the amount of water decreases, the importance of accurate calibration and uniform application increases. Check the sprayer daily.

Do not apply the herbicide to soils which are wet or in poor conditions or to soils which are subject to prolonged period of flooding.

AERIAL APPLICATION

For best results apply to a dry soil surface at a spray volume of from 5 to 10 gallons/acre. Adjust pump pressure, nozzle arrangements, flying speed and height to provide uniform application. Use markers or flagmen to assure proper application spray widths.

Do not apply when the wind is blowing at a velocity of 5 mph or greater.

INCORPORATION

Before planting.

For best results the herbicide must be incorporated within 24 hours after application. A second incorporation is required at any time prior to planting using the equipment in a different direction from the first. Incorporation should place the product into the top 2 or 3 inches of the final seedbed.

Variable weed control may result from delayed incorporation if the herbicide is applied to a wet, warm soil surface or if the wind velocity is 10 mph or higher.

After planting.

When incorporating after planting (check crops approved for incorporation after planting), use P.T.O.-driven equipment or Rolling Cultivators and adjust to till the soil over the seed or throw treated soil toward the crop. Avoid disturbing the seed or mechanically damaging the crop.

In bedded culture.

For effective weed control in bedded culture the product should be incorporated in to the top 2 to 3 inches of the final seedbed. Knock off beds to planting height before application and incorporation on bedded ground. Avoid removal of treated soil from the seedbed before or during the planting operation. This will expose untreated soil and allow weeds to germinate in the drill row.

Equipment.

For incorporation use machinery which pulverize large clods and mix the herbicide thoroughly with the soil. Thorough incorporation may be achieved with the following: Disc, set to cut 4 to 6 inches deep and operated in two different directions at 4 to 6 mph; Field Cultivator, set to cut 3 to 4 inches deep and operated at 5 mph or more; Rolling Cultivator, set to cut 2 to 4 inches deep and operated two times at 6 to 8 mph (adequate for use on coarse and medium textured soils only); Bed Conditioner, set to cut 2 to 4 inches deep and operated one time at 4 to 6 mph (adequate for use on coarse and medium textured soils only); Mulch Treader and other similar disc-type implements, set to cut 3 to 4 inches deep and operated at 5 to 8 mph in two different directions; P.T.O.-driven equipment (tillers, cultivators, hoes), set to cut 2 to 3 inches deep with rotors spaced to provide a clean sweep of the soil and operated one time (they should not be operated at a speed greater than 4 mph).

APPLICATION WITH LIQUID FERTILIZERS

IPIFLUOR FIVE EC may be mixed with most liquid fertilizers. The mixture has provided weed and grass control equal to the same rates of IPIFLUOR FIVE EC applied in water.

All individual state regulations relating to fluid fertilizer mixing, registration, labeling and application are the responsibility of the individual and/or company selling the fertilizer and chemical mixture.

IPIFLUOR FIVE EC alone or in tank-mixture may not combine properly with some fluid fertilizer material. Therefore, it is necessary to determine whether a compatibility agent is needed and which agent works properly testing small quantities before full-scale mixing.

1. Put 1 pt of fertilizer mixture in a quart jar.
2. Add 1 to 4 teaspoonfuls of the formulation which must be mixed to the liquid fertilizer (depending on the recommended rate/acre).
3. Close jar and agitate until the materials are dispersed evenly in the fertilizer. If the materials do not disperse well, slurry the chemicals in water before adding to the fertilizer.
4. Add 3 to 4 teaspoonfuls of IPIFLUOR FIVE EC to the jar and shake well.

5. Watch mixture for about 10 minutes. If the mixture does not separate, or if agitation is only required to resuspend the combination may be used. If the mixture separates, gets very thick or syrupy DO NOT combine for field application. A compatibility agent is needed.
6. Mixing ability may be improved by adding a compatibility agent. Follow the procedure outlined above and add 0.1 teaspoonful of the compatibility agent in step 2. Complete the other steps to determine if the compatibility agent solves the problem.

The use of compatibility agents is especially important when tank mixing emulsifiable concentrates with dry flowables, wettable powders, aqueous suspensions, flowables, liquids or solutions in liquid fertilizers.

If a compatibility agent is needed, add it to the fluid fertilizer before adding the IPIFLUOR FIVE EC alone or in mixture. Follow normal application procedures to apply and incorporate.

APPLICATION WITH DRY BULK FERTILIZERS

Dry bulk fertilizers may be impregnated or coated with IPIFLUOR FIVE EC. Application of dry bulk fertilizers impregnated with IPIFLUOR FIVE EC has provided weed and grass control equal to the same rates of IPIFLUOR FIVE EC applied in water.

All IPIFLUOR FIVE EC label recommendations regarding rates/acre, approved crops, incorporation, special instructions, cautions and special precautions must be followed. All individual state regulations relating to dry bulk fertilizer blending, registration, labeling and application are the responsibility of the individual and/or company selling the fertilizer and chemical mixture.

Limitations.

Apply a minimum of 200 pounds/acre of dry fertilizer impregnated with IPIFLUOR FIVE EC at the recommended rates. Any commonly used dry fertilizer can be used for IPIFLUOR FIVE EC impregnation except coated ammonium nitrate and straight limestone. These materials will not absorb the herbicide. Blends containing mixtures of these materials can be impregnated.

Impregnation.

Use any closed drum, belt, ribbon or other commonly used dry bulk fertilizer blender. Provide uniform spray coverage of IPIFLUOR FIVE EC on to the fertilizer.

Rates.

Check the crop section to determine the rate of IPIFLUOR FIVE EC /acre. See the rate table which follows to determine amount of IPIFLUOR FIVE EC to be impregnated on a ton of dry bulk fertilizer based on the amount of fertilizer which will be applied/acre.

Application.

Spread the fertilizer/chemical mixture normally with a properly calibrated applicator. Be certain the material is applied uniformly to the soil surface.

Incorporation.

Follow normal incorporation procedures.

P. 16/39 11

Rate Chart for Impregnating Fertilizer with IPIFLUOR Five EC
(Ipifluor added to a Ton of fertilizer)

Fertilizer Rate per Acre	IPIFLUOR 'FIVE EC RATE/ACRE					
	4 qts/ton	6 qts/ton	8 qts/ton	12 qts/ton	16 qts/ton	
200 pounds	4 qts/ton	6 qts/ton	8 qts/ton	12 qts/ton	16 qts/ton	
250 pounds	3.2 qts/ton	4.8 qts/ton	6.4 qts/ton	9.6 qts/ton	12.8 qts/ton	
300 pounds	2.7 qts/ton	4 qts/ton	5.6 qts/ton	8 qts/ton	10.8 qts/ton	
350 pounds	2.3 qts/ton	3.6 qts/ton	4.8 qts/ton	6.8 qts/ton	9.2 qts/ton	
400 pounds	2 qts/ton	3 qts/ton	4 qts/ton	6 qts/ton	8 qts/ton	
450 pounds	1.8 qts/ton	2.7 qts/ton	3.6 qts/ton	5.4 qts/ton	7.2 qts/ton	

For rates other than those listed above, use the following formula to calculate the amount of Ipifluor to be impregnated on a ton of dry bulk fertilizer:

$$\frac{\text{Pints of Ipifluor Five EC/acre}}{\text{Five EC/acre}} \times \frac{1000}{\text{Lbs fertilizer/acre}} = \frac{\text{Quarts Ipifluor Five EC}}{\text{Ton of fertilizer}}$$

DIRECTIONS FOR USE

Where applicable, rates are given for eastern United States and Western United States. The dividing line between Eastern and Western States is the point where the average rainfall per year is a minimum of 20 to 25 inches.

Rates are given for broadcast application, for band application use proportionally amount of product.

ALFALFA (Established)

Use restricted to Western US only. ✓

Apply to established alfalfa stands at a broadcast rate/acre of 1.2 pts on coarse soil and 1.6 pts on medium and fine soils. Use incorporation equipment that will ensure thorough soil mixing with a minimum of damage to the established alfalfa. ✓

ASPARAGUS (Established)

In winter or early spring apply after ferns are removed but before spear emergence or apply after harvest in the late spring early summer before ferning begins. Applied as a single or as a split application at the following: ✓

P¹²/₃₉

Soil texture	Broadcast rate/acre		Single application	
	Split application Before harvest	After harvest	Before harvest	After harvest
Coarse	0.8 pts +	0.8 pts	1.6 pts OR	1.6 pts ✓
Medium	1.2 pts +	1.2 pts	2.4 pts OR	2.4 pts ✓
Fine	1.6 pts +	1.6 pts	3.2 pts OR	3.2 pts ✓

Maximum IPIFLUOR FIVE EC in any calendar year: 1.6 pts/acre on coarse soil, 2.4 pts/acre on medium soil, 3.2 pts/acre on fine soil. ✓

BEANS

DRY BEANS - CASTOR BEANS ✓

Apply and incorporate before planting at the following:

Soil texture	Broadcast rate/acre	
	Eastern US	Western US
Coarse	0.8 pts	0.8 pts ✓
Medium	1.2 pts	1-1.2 pts ✓
Fine	1.6 pts	1.2 pts ✓
2 to 5% organic matter	1.2-1.6 pts	1.2-1.6 pts
5.1 to 10% organic matter	1.6 pts	1.6 pts ✓

Fall application.

For dry beans grown in Idaho, Oregon, Washington only, apply any time between October 15 and December 31 at a broadcast rate/acre of 0.8 pt on coarse soil, 1 to 1.2 pts on medium soil, 1.2 pts on fine soil. ✓

IPIFLUOR FIVE EC/ EPTAM^R TANK-MIX :

FOR DRY BEANS

Apply from two days before planting (up to planting in the Eastern US) at the following:

Soil texture	<u>Broadcast rate/acre</u>		
	IPIFLUOR Eastern US	FIVE EC Western US	EPTAM 7E
Coarse	0.8 pts	0.8 pts	2½ - 3½ pts
Medium	1.2 pts	1-1.2	2½ - 3½ pts
Fine	1.6 pts ✓	1.2 pts ✓	2½ - 3½ pts
2 to 5% organic matter	1.2-1.6 pts	1.2-1.6 pts	2½ - 3½ pts
5.1 to 10% organic matter	1.6 pts ✓	1.6 pts ✓	2½ - 3½ pts ✓

Precautions: this combination should not be used on soybean, black-eyed peas (beans), lima beans and other flatpoddeds beans excepted Romano. Do not use the foliage from a crop treated with this tank-mix for feed or for grazing. ✓

Observe all directions, precautions and limitations on both products labeling. ✓

GUAR BEANS, MUNGBEANS, LIMA BEANS, SNAP BEANS ✓

Apply and incorporate before planting at a broadcast rate/acre of 0.8 pt on coarse soil, 1.2 pts on medium and fine soils. ✓

CARROTS ✓

Apply and incorporate before planting at the following:

Soil texture	<u>Broadcast rate/acre</u>	
	Eastern US	Western US
Coarse	0.8 pts	0.8 pts
Medium	1.2 pts	1-1.2 pts
Fine	1.6 pts ✓	1.2 pts ✓
2 to 5% organic matter	1.2-1.6 pts	1.2-1.6 pts
5.1 to 10% organic matter	1.6 pts	1.6 pts

 CELERY

Both direct-seeded and transplant.

Apply and incorporate before planting or transplanting at the following:

Broadcast rate/acre

Soil texture	Western US only
Coarse	0.8 pts
Medium	1-1.2 pts
Fine	1.2
2 to 5% organic matter	1.2-1.6 pts
5.1 to 10% organic matter	1.6 pts

 COLE CROPS

BROCCOLI - BRUSSEL SPROUTS - CABBAGE - CAULIFLOWER

For transplants, apply and incorporate before transplanting at the following:

Broadcast rate/acre

Soil texture	Eastern US	Western US
Coarse	0.8 pts	0.8 pts
Medium	1.2 pts	1-1.2 pts
Fine	1.6 pts	1.2 pts
2 to 5% organic matter	1.2-1.6 pts	1.2-1.6 pts
5.1 to 10% organic matter	1.6 pts	1.6 pts

For direct-seeded, apply and incorporate before planting at the following:

Broadcast rate/acre

Soil texture	Eastern US	Western US
Coarse	0.8 pts	0.8 pts
Medium	0.8 pts ✓	0.8 pts ✓
Fine	1.2 pts	0.8 pts
2 to 5% organic matter	1.2 pts	
5.1 to 10% organic matter	✓	1.2 pts ✓

Direct-seeded cole crops have exhibited marginal tolerance to recommended rates. Stunting or reduced stands may occur.

COTTON

Pre-emergence application.

Apply and incorporate before planting, at planting or immediately after planting at the following:

Broadcast rate/acre

Soil texture	Eastern US	Western US
Coarse	0.8 pts	0.8 pts
Medium	1.2 pts	1-1.2 pts ✓
Fine	1.6 pts ✓	1.2 pts
2 to 5% organic matter	1.2 pts	1.2-1.6 pts
5.1 to 10% organic matter	1.6-2 pts	1.6 pts

When incorporating after planting care must be taken not to disturb the seed. ✓

Post-emergence application.

Apply any time up to layby but not less than 90 days before harvest. Direct layby applications to the soil between the rows and beneath emerged cotton plants. Use the same rates as for pre-emergence application. ✓

Fall application.

Any time from October 15 to december 31. ✓

- In Alabama, Arkansas, Northern Florida, Georgia, Louisiana, Mississippi, SE Missouri, North Carolina, Tennessee, Texas: apply and incorporate at a broadcast rate/acre of 1.6 pts on coarse and medium soils and 2 pts on fine soil. ✓

- In Arizona, California, Nevada, apply and incorporate at a broadcast rate/acre of 1.2 pts on coarse soil, 1.6 pts on medium soil, 2 pts on fine soil.
- In other states other than those listed above, apply and incorporate at a broadcast rate/acre of 0.8 pt on coarse soil, 1.2 pts on medium soil, 1.6 pts on fine soil, 1.2 pts on soils with 2 to 5% organic matter, 1.6-1.2 pts on soils with 5.1 to 10% organic matter.

Special applications.

- For the control of Fall Panicum in the states of Alabama, Florida, Georgia, North and South Carolina and Virginia, apply and incorporate at a broadcast rate/acre of 1.6 pts on both coarse and medium soils.

- For the control of Rhizome Johnsongrass in all cotton producing states except Arizona and California, apply a double-rate IPIFLUOR FIVE EC program for 2 years in a row.

Applications can be made in spring, any time before planting for two years in a row or between October 15 and December 31 for two years in a row at a broadcast rate/acre of 1.6 pts on coarse soil, 2.4 pts on medium soil and 3.2 pts on fine soil. Proper preparation of the soil before application and deep incorporation is essential for best results. Some Johnsongrass plants may escape: timely cultivation during the crop season is necessary.

In the season following a double-rate treatment, plant only rice and those crops for which IPIFLUOR FIVE EC can be applied as a pre-plant treatment or injury may result.

- For the control of Pigweed and seedling Johnsongrass in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, SE Missouri, North and South Carolina, Tennessee and Southern Virginia, apply IPIFLUOR FIVE EC, pre plant, at a broadcast rate/acre of 0.8-1.2 pts on coarse soil, 1.2-1.6 pts on medium soil, 1.6 pts on fine soil (2.4 pts in Louisiana).

- For a more complete control of all listed grasses and weeds in countries along the Texas Gulf Coast, apply up to 2 weeks before planting at a broadcast rate/acre of 1.2 pts on coarse soil, 1.6 pts on medium soil, 2.4 pts on fine soil.

Precautions: cotton should be planted after early season adverse weather conditions have passed especially when using higher rate programs.

IPIFLUOR FIVE EC /CAPAROL^R TANK-MIX

For cotton grown in California, Arizona, New Mexico and Texas, apply to the flat soil surface before discing at the following:

<u>Broadcast rate/acre</u>		
<u>Soil texture</u>	<u>IPIFLUOR</u>	<u>FIVE EC CAPAROL 80 W</u>
Coarse	0.8 pts	2 lbs
Medium	1-1.2 pts	2½ lbs
Fine	1.6 pts	2½ lbs

Do not use on sand and loamy sand soils.

1063-99

IPIFLUOR FIVE EC PREPLANT FOLLOWED BY KARMEX^R OVERLAY

For cotton grown east of the Mississippi river, Arkansas, SE Missouri, Louisiana, Texas, apply and incorporate IPIFLUOR FIVE EC before planting at usual rates then make a pre-emergence application of Karmex 80W at 0.6 to 1.5 lbs per broadcast acre.

Precautions: do not use Karmex on sandy or low organic soils. Do not allow graze on cotton treated with Karmex.

Refer to Karmex 80W label for additional instructions, cautions and precautions.

CUCURBITS
CANTALOUPE - CUCUMBERS - WATERMELONS

Apply in post-plant emerged at the following:

Soil texture	Broadcast rate/acre	
	Texas only	Western US
Coarse	0.8 pts	0.8 pts
Medium	1-1.2 pts	1-1.2 pts
Fine	1.2 pts	1.2 pts
2 to 5% organic matter	1.2-1.6 pts	1.2-1.6 pts
5.1 to 10% organic matter	1.6 pts	1.6 pts

Apply as directed spray to the soil between the rows and beneath the plants which are in the 3 to 4 true-leaf stage. Care should be taken that incorporation machinery does not damage the plants.

GREENS
TURNIPGREENS (for processing) - KALE - MUSTARD GREENS

Apply and incorporated before planting at a broadcast rate/acre of 0.8 pt on coarse and medium soils, 1.2 pts on fine soil.

HOPS

Use restricted to Western US only.

Apply and incorporate while the crop is dormant at a broadcast rate/acre of 0.8 pt on coarse soil, 1 - 1.2 pts on medium soil, 1.2 pts on fine soil and soils with 2 to 10% organic matter.

p. 23/13/19

MINT

Established Peppermint and Spearmint.
Use restricted to Oregon, Washington, Idaho.
Apply at a rate of 0.8pt on coarse soil, 1 pt on medium soil and 1.2 pts on fine soil during the dormant period.
Use incorporation equipment that will insure thorough soil mixing with a minimum of damage to the established dormant mint.

OKRA

Apply and incorporate before planting at the following:

Broadcast rate/acre

Soil texture	Eastern US	Western US
Coarse	0.8 pts	0.8 pts
Medium	1.2 pts	1-1.2 pts
Fine	1.6 pts	1.2 pts
2 to 5% organic matter	1.2-1.6 pts	1.2-1.6 pts
5.1 to 10% organic matter	1.6 pts	1.6 pts

PEANUTS

Spanish peanuts grown in Texas and Oklahoma only.
Apply and incorporate before planting, at planting or immediately after planting at a broadcast rate/acre of 0.8 pt on coarse soil. Care should be taken not to disturb the seed when incorporating after planting.

IPIFLUOR . FIVE EC /VERNAM^R TANK-MIX

Apply up to 10 days prior to planting, incorporate immediately after application at a broadcast rate/acre of 0.8pt of IPIFLUOR FIVE EC and 2/3 pts of Vernam 7E.
Observe all directions, precautions and limitations on both products labeling.

PEAS

ENGLISH PEAS - DRY PEAS

Apply and incorporate before planting at a broadcast rate/acre of 0.8pt on coarse

and medium soils and 1.2 pts on fine soil.

Fall application

- For dry and English peas grown in Idaho, Oregon and Washington only, apply and incorporate any time between October 15 and December 31 at a broadcast rate/acre of 0.8 pt on coarse soil, 1-1.2 pts on medium soil and 1.2 pts on fine soil. Do not apply in the fall to soils which are wet or are subject to prolonged period of flooding.

IPIFLUOR FIVE EC / AVADEX^R BW TANK-MIX

For peas grown in Idaho, Oregon and Washington only, apply and incorporate up to 3 weeks before planting at the following:

Broadcast rate/acre

Soil texture	IPIFLUOR	FIVE EC	AVADEX BW
Coarse	0.6 pts		1/4 qts
Medium	0.6 pts		1/4 qts
Fine	0.8 pts		1/4 qts

Precautions: do not apply to lentils. Do not use foliage from peas treated for feed or forage.

Observe all directions, precautions and limitations on both products labeling.

SOUTHERN PEAS

Apply and incorporate before planting at the following:

Broadcast rate/acre

Soil texture	Eastern US	Western US
Coarse	0.8 pts	0.8 pts
Medium	1.2 pts	1-1.2 pts
Fine	1.6 pts	1.2 pts
2 to 5% organic matter	1.2-1.6 pts	1.2-1.6 pts
5.1 to 10% organic matter	1.6 pts	1.6 pts

PEPPERS

Apply and incorporate before transplanting at the following:

<u>Broadcast rate/acre</u>		
Soil texture	Eastern US	Western US
Coarse	0.8 pts	0.8 pts
Medium	1.2 pts	1-1.2 pts
Fine	1.6 pts	1.2 pts
2 to 5% organic matter	1.2 pts	1.2-1.6 pts
5.1 to 10% organic matter	1.6 pts	1.6 pts

Do not apply after transplanting.

POTATOES

Not recommended for use in the state of Maine.

Apply after planting, before emergence or immediately following dragoff or after the potato plants have fully emerged at the following:

<u>Broadcast rate/acre</u>		
Soil texture	Eastern US	Western US
Coarse	0.8 pts	0.8 pts
Medium	1.2 pts	1-1.2 pts
Fine	1.6 pts	1.2 pts
2 to 5% organic matter	1.2 pts	1.2-1.6 pts
5.1 to 10% organic matter	1.6 pts	1.6 pts

Care should be taken so that incorporation machinery does not damage potato seed pieces or elongating sprouts. Set incorporation equipment so that bed and furrow will be uniformly covered by the product.

If the layer of IPIFLUOR FIVE EC treated soil is not uniform, potato emergence may be retarded and stem brittleness can occur.

When applying and incorporating after potato plants have fully emerged, do not completely cover the foliage with treated soil.

Split application in Idaho, Oregon, Washington.

On all soils apply and incorporate 0.6 pt before planting and 0.6 pt after planting when potato plants have fully emerged.

Precautions: do not apply to soil containing 2% or more organic matter.

P. 20/39

IPIFLUOR FIVE EC/EPTAM^R TANK-MIX

- For potatoes grown in Kansas, Minnesota, Nebraska, North Dakota, Oklahoma, South Dakota, Texas, apply after planting, but prior to crop emergence. In areas where potatoes are normally dragged off the mixture should be applied and incorporated up to or immediately following drag off.

Broadcast rate/acre

Soil texture	IPIFLUOR	FIVE EC	EPTAM 7E
	Eastern US	Western US	
Coarse	0.8 pts	0.8 pts	1 $\frac{3}{4}$ - 7 pts (°)
Medium	0.8-1.2 pts	0.8-1.2 pts	1 $\frac{3}{4}$ - 7 pts (°)
Fine	0.8-1.6 pts	0.8-1.2 pts	1 $\frac{3}{4}$ - 7 pts (°)
2 to 5% organic matter	1.2 pts	1.2 pts	1 $\frac{3}{4}$ - 7 pts (°)
5.1 to 10% organic matter	1.6 pts	1.6 pts	1 $\frac{3}{4}$ - 7 pts (°)

(°) Use higher rates for nutsedge control.

Precautions: do not graze or feed forage to livestock from fields treated with this mixture.

- For potatoes grown in Washington, Idaho, Oregon, apply and incorporate before planting at a broadcast rate of 0.6 pts of IPIFLUOR FIVE EC /acre and 3 $\frac{1}{2}$ pts of EPTAM 7E/acre on all soils.

Precautions: do not use this tank-mixture both before and after planting in the same season. Do not use foliage from treated crops for feed or forage.

Observe all directions, precautions and limitations on both products labeling.

SAFFLOWER

Apply and incorporate in the spring before planting or in the fall between October 15 and December 31 at the following:

Broadcast rate/acre

Soil texture	Eastern US	Western US
Coarse	0.8 pts	0.8 pts
Medium	1.2 pts	1-1.2 pts
Fine	1.6 pts	1.2 pts
2 to 5% organic matter	1.2 pts	1.2 pts
5.1 to 10% organic matter	1.6-2 pts	1.6-2 pts

Fall application

For safflowers grown in Arizona, California, Idaho, Montana, Nevada, Oregon, Utah, Washington, Wyoming: apply and incorporate anytime between October 15 and December 31 at a broadcast rate/acre of 1.2 pts on coarse soil, 1.6 pts on medium soil, 2 pts on fine soil.

Precautions: do not apply in the fall to soils which are wet or are subject to prolonged periods of flooding.

SOYBEAN

Apply and incorporate before planting at the following:

Broadcast rate/acre

Soil texture	Eastern US	Western US
Coarse	0.8 pts	0.8 pts
Medium	1.2 pts	1-1.2 pts
Fine	1.6 pts	1.2 pts
2 to 5% organic matter	1.2 pts	1.2-1.6 pts
5.1 to 10% organic matter	1.6-2 pts	1.6 pts

(*) except charcoal soils in Arkansas, Louisiana and Mississippi (see below)

Charcoal soils in Arkansas, Louisiana, Mississippi.

Newly cleared land often contains high organic matter (4 to 10%) and charcoal which result from burning debris. This tend to bind Ipifluor reducing its weed control activity. Higher product rates are therefore necessary, but increased rates can cause crop injury if charcoal or organic matter is not present.

Apply and incorporate at a broadcast rate/acre of 1.6 - 2 pts on coarse soil, 2 pts on medium soil, 2.4 pts on fine soil.

Fall application

Apply anytime between October 15 and December 31.

- In Alabama, Arkansas, Northern Florida, Georgia, Louisiana, Mississippi, SE Missouri Bootheel, North Carolina, Oklahoma, South Carolina, Tennessee, Texas: apply and incorporate at a broadcast rate/acre of 1.6 pts on coarse and medium soils and 2 pts on fine soil.
- In Eastern United States other than those listed above: apply and incorporate at a broadcast rate/acre of 0.8 pt on coarse soil, 1.2 pts on medium soil and 1.6 pts on fine soil, 1.2 pts on coarse soil with 2 to 5% organic matter, 1.6-2 pts on soils with 5.1 to 10% organic matter.

Precautions: do not apply to soils which are wet or subject to prolonged periods of flooding or where rice was grown the previous year.

Special applications

- 10163-99
- For the control of Fall Panicum in Alabama, Florida, Georgia, North and South Carolina, Virginia: apply at a broadcast rate/acre of 1.6 pts on both coarse and medium soils.
 - For a more complete control of Pigweed and seedling Johnsongrass in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, SE Missouri, North and South Carolina, Tennessee, S. Virginia: apply at a broadcast rate/acre of 0.8-1.2 pts on coarse soil, 1.2 - 1.6 pts on medium soil, 1.6 pts on fine soil (2.4 pts in the state of Louisiana).
 - For a more complete weed control in the Texas Gulf Coast: apply up to 2 weeks before planting at a broadcast rate/acre of 1.2 pts on coarse soil, 1.6 pts on medium soil, 2.4 pts on fine soil.
 - For suppression or partial control of Red Rice in Arkansas, Louisiana, Mississippi, Texas: apply as directed at double the normal rate the first year and at the normal rate the second year. Apply and incorporate anytime in the spring before planting at the following:

Broadcast rate/acre

Soil texture	1st Year	2nd Year
Coarse	1.6 pts	0.8 pts
Medium	2.4 pts	1.2 pts
Fine	3.2 pts	1.6 pts
2 to 5% organic matter	2.4 pts	1.2 pts
5.1 to 10% organic matter	3.2 pts	1.6-2 pts

(°) If a combination of high organic matter and charcoal are present apply in the second year the rates labeled for charcoal soils in Louisiana, Arkansas and Mississippi (1.2 - 2 pts on coarse soil, 2 pts on medium soil, 2.4 pts on fine soil).

Crop rotation: plant only those crops for which IPIFLUOR FIVE EC has been registered as a preplant treatment.

Precautions: do not plant rice the second year.

- For the control of Rhizome Johnsongrass in Eastern United States and Texas. Apply in a row for two consecutive years according to the program that best fits your cultural practices:
 - . as spring application, anytime in spring before planting,
 - . as fall application, between October 15 And December 31,
 - . as split application, directed under both spring and fall applications.

Broadcast rate/acre

Soil texture	Spring/Fall	Split
Coarse	1.6 pts	0.8 pts
Medium	2.4 pts	1.2 pts
Fine	3.2 pts ✓	1.6 pts ✓
2 to 5% organic matter	2.4 pts	1.2 pts
5.1 to 10% organic matter	3.2 pts	1.6 pts

Proper preparation of the soil before application and deep incorporation are very important for best results. Some Johnsongrass plants may escape. Timely cultivations during the crop season are necessary. ✓

- For the control of Wild Cane (shattercane). ✓
Wild cane can germinate from greater soil depth than most other weed seeds. Several "flushes" or germinating times are common in one season. Commercially acceptable control of Wild Cane can be obtained with increased rates of ✓

Land preparation. Work your land to destroy existing grasses and weeds. Thoroughly mix crop residues into the soil to a depth of 4 to 6 inches. ✓

Application. Apply before planting at a broadcast rate/acre of 0.8 pt on coarse soil, 1.6 pts on medium soil, 2 pts on fine soil. ✓

Incorporation. Deep incorporation is essential to good wild cane control. Incorporate thoroughly with a disc only set to cut 4 to 6 inches deep and operate in 2 different directions at 4 to 6 mph. ✓

Cultivation. Cultivations during the crop season will also contribute to control.

Precautions. plant soybeans after early season adverse weather conditions have passed; Do not plant soybeans deeper than 2 inches. Crop injury in the form of delayed growth may occur under adverse cool, wet weather conditions early in the season when IPIFLUOR FIVE EC is used according to these recommendations. ✓

IPIFLUOR FIVE EC / SENCOR^R OR LEXONE^R TANK-MIX ✓

- For the control of grasses and weeds controlled by IPIFLUOR FIVE EC alone plus additional weeds listed for the mixture, apply from two weeks before planting up to planting at the following:

P. 211/1391

Broadcast rate/acre

Soil texture	IPIFLUOR	FIVE EC	Sencor 50WP/4 or Lexone 50WP/4L
Coarse	0.8 pts		$\frac{1}{2}$ lb/pt
Medium	1.2 pts	✓	$\frac{3}{4}$ lbs/pts ✓
Fine	1.6 pts		1 lb/pt

Do not use on coarse soils with less than 1% organic matter.

OR

Soil texture	IPIFLUOR	FIVE EC	Sencor (dry flow.) or Lexone (dry flow.)
Coarse	0.8 pts		$\frac{1}{3}$ lbs
Medium	1.2 pts	✓	$\frac{1}{2}$ lbs ✓
Fine	1.6 pts		$\frac{2}{3}$ lbs

Do not use on coarse soils with less than 1% organic matter.

Precautions: do not plant any crop other than soybeans within 4 months after treatment. Over application, uneven application or improper incorporation can result in erratic weed control or crop injury. Seedling disease, cold weather, deep planting, excessive moisture, soil pH over 7.5, high salt concentration or droughty may weaken crop seedlings and increase possibility of damage from the application of this tank-mix.

- For the control of Rhizome Johnsongrass. ✓

Apply up to two weeks before planting for two consecutive years at the following:

Broadcast rate/acre

Soil texture	IPIFLUOR	FIVE EC	Sencor 50WP/4 or Lexone 50WP/4L
Coarse	1.6 pts		$\frac{1}{2}$ lb/pt
Medium	2.4 pts	✓	$\frac{3}{4}$ lbs/pts ✓
Fine	3.2 pts		1 lb/pt

Do not use on coarse soils with less than 1% organic matter.

P. 31/39 27

Soil texture	OR		Sencor (dry flow.)
	IPIFLUOR	FIVE EC	or Lexone (dry flow.)
Coarse	1.6 pts		$\frac{1}{3}$ lbs
Medium	2.4 pts	✓	$\frac{1}{2}$ lbs
Fine	3.2 pts		$\frac{2}{3}$ lbs

Do not use on coarse soils with less than 1% organic matter. ✓

Precautions: do not use the foliage from soybeans for feed or forage.

Observe all directions, precautions, limitations and mixing procedures on both products labeling.

IPIFLUOR FIVE EC PREPLANT + SENCOR OR LEXONE OVERLAY ✓

Apply IPIFLUOR FIVE EC as a preplant incorporated herbicide. As a separate operation make a single application of Sencor or Lexone as either a band or broadcast spray during planting or as a separate operation after planting but before soybeans emerge.

(Rates are given according to the use of Sencor or Lexone respectively).

Broadcast rate/acre

Soil texture	IPIFLUOR : FIVE EC	Sencor 50WP/4 or Lexone 50WP/4L	
		Postplant/Preemergence	
Coarse	0.8 pts	$\frac{3}{4}$ - 1	or $\frac{3}{4}$ lbs/pts
Medium	1.2 pts	$\frac{3}{4}$ - 1½	or $\frac{3}{4}$ - 1 lbs/pts ✓
Fine	1.6 pts	1 - $1\frac{3}{4}$	or 1 lbs/pts

Do not apply Sencor to coarse soils (sandy loam and loamy sand) containing less than 2% organic matter.

Do not apply Lexone to sand or soils with less than ½% organic matter. ✓

OR

P. 30/39

Soil texture	IPIFLUOR	FIVE EC	Sencor (dry flowable)
			or Lexone (dry flowable)
			Postplant/preemergence
Coarse	0.8 pts		$\frac{1}{2} - \frac{2}{3}$ or $\frac{1}{2}$ lbs/pts
Medium	1.2 pts	✓	$\frac{1}{2} - 1$ or $\frac{2}{3}$ lbs/pts ✓
Fine	1.6 pts		$\frac{2}{3} - 1\frac{1}{6}$ or $\frac{2}{3}$ lbs/pts ✓

Do not apply Sencor to coarse soils (sandy loam and loamy sand) containing less than 2% organic matter.

Do not apply Lexone to sand or soils less than $\frac{1}{2}$ % organic matter.

Precautions: do not use Lexone or Sencor on Tracy, Semmes, Altona, Vansoy or Coker 102 soybeans being these varieties sensitive to above products.

Do not use treated vines for feed or forage. Seed must be planted at least $1\frac{1}{2}$ inches below the soil surface but not more than 2 inches before a Sencor or Lexone application. ✓

Do not apply Sencor or Lexone more than once per season.

Do not replant areas treated with sencor or Lexone to any crops other than soybean within 4 months after treatment.

Observe all directions, precautions and limitations on all products labeling. ✓

IPIFLUOR FIVE EC/AMIBEN^R TANK-MIX OR OVERLAY ✓

Tank-mix: apply as a spring preplant incorporated treatment.

Overlay: apply IPIFLUOR FIVE EC as a preplant incorporated herbicide and then Amiben 2S broadcast or in a band over the soybean row at planting time.

Broadcast rate/acre

Soil texture	IPIFLUOR	FIVE EC	AMIBEN 2S
Coarse	0.8 pts		4-6 qts
Medium	1.2 pts	✓	4-6 qts ✓
Fine	1.6 pts		4-6 qts

Use the higher rates of Amiben 2S where you expect heavy populations of smartweed, velvetleaf, ragweed, wild mustard and blacknightshade. ✓

Observe all directions, precautions and limitations on both products labeling.

IPIFLUOR FIVE EC /VERNAM^R TANK-MIX ✓

Apply up to 10 days prior to planting at the following: ✓

Broadcast rate/acre

Soil texture	IPIFLUOR	FIVE EC	VERNAM 7E
Coarse	0.8 pts		$1\frac{3}{4} - 2\frac{1}{3}$ pts
Medium	1.2 pts		$2\frac{1}{3} - 3$ pts (°)
Fine	1.6 pts		3 - $3\frac{1}{2}$ pts

(°) Use higher rates for nutsedge, wild cane and velvetleaf control.

Observe all directions, precautions and limitations on both product labeling.

SUGAR BEETS

Apply as a broadcast, overtop spray to plants immediately after blocking or thinning when plants are between 2 and 5 inches tall. Exposed beet roots should be covered with soil prior to application to reduce possibilities of girdling. Care should be taken that incorporation machinery does not damage the sugar beets taproot.

Broadcast rate/acre

Soil texture	Eastern US	Western US
Coarse	0.8 pts	0.8 pts
Medium	1.2 pts	1-1.2 pts
Fine	1.2 pts	1.2 pts

Special application.

- Incorporation with a tine-tooth harrow in California, Colorado, Idaho, Montana, Nebraska, Oregon, Texas, Utah, Washington, Wyoming.

A properly operated tine-tooth harrow can provide adequate incorporation of the herbicide for effective weed control in sugar beets. Operate the tine-tooth harrow two times over the field in opposite directions at a speed of 3 to 6 mph and set the harrow to cut 1 to 2 inches deep. Care should be taken to insure that the tine-tooth harrow does not damage the sugar beet taproot.

SUGARCANE

Plant Cane

Apply and incorporate twice a year at a broadcast rate/acre of 1.6-3.2 pts for all soil textures. Make the application in the fall on firmly packed beds immediately after the seed pieces are planted.

Make the application in the spring before or shortly after the cane emerges. Loosen rain-packed beds 2 to 3 inches deep before the spring application. Care should be taken so that incorporation machinery does not damage the seed pieces or emerging shoots.

Plant and Ratoon Cane (grown in Louisiana and Texas only)

Apply and incorporate at a broadcast rate/acre of 1.6 - 3.2 for all soil textures. Make application in the spring from before or shortly after the cane emerges up to layby. Make application after the beds have been shaved or false shaved. Loosen rain-packed bed 2 to 3 inches deep before application. Care should be taken so that incorporation machinery does not damage seed pieces or emerging roots.

Post-plant in Hawaii (only for control of most annual grass including guineagrass)

Surface apply after planting (for plant cane) or after harvesting (for ratoon cane) before weeds and cane emerge at a broadcast rate/acre of 4.8 - 6.4 pts for all soil textures. In plant cane the beds should be formed or rolled before application. In ratoon cane, the crop residue should be removed before application. Apply just before anticipated rainfall or sprinkle irrigate immediately after application.

Itchgrass control (in Louisiana only)

Apply and incorporate on either plant or ratoon cane at a broadcast rate/acre of 3.2 pts for all soil textures. Apply in the spring from before or shortly after the cane emerges up to layby. Follow directions above for sugarcane layby application in Louisiana and Texas.

SUNFLOWER

Apply and incorporate in the spring or in the fall between October 15 and December 31 at the following:

Broadcast rate/acre

Soil texture	Eastern US	Western US
Coarse	0.8 pts	0.8 pts
Medium	1.2 pts	1-1.2 pts
Fine	1.6 pts	1.2 pts
2 to 5% organic matter	1.2-1.6 pts	1.2-1.6 pts
5.1 to 10% organic matter	1.6 pts	1.6 pts

P. 33/31

IPIFLUOR FIVE EC /AMIBEN^R TANK-MIX OR OVERLAY

Tank-mix: apply prior to planting.

Overlay : apply Amiben 25 in band or broadcast over sunflowers at planting in fields where IPIFLUOR FIVE EC has been incorporated prior to planting.

Broadcast rate/acre

Soil texture	IPIFLUOR FIVE EC	AMIBEN 25
Coarse	0.8 pts	4 qts
Medium	1.2 pts	4 - 6 qts (°)
Fine	1.6 pts	4 - 6 qts (°)

(°) Use higher rates for best control of Mustard, Common Ragweed or Black Nightshade.

If sufficient rain does not fall within 7 days after a pre-emergence application of Amiben, but there is enough soil moisture, a light cultivation with a rotary hoe or similar tool will uproot these small broadleaf weeds and grasses. In coarse soil heavy rains may move incorporated Amiben below the weed seed germinating zone; erratic weed control may result.

TOMATOES

For transplant, apply and incorporate before transplanting at the following:

Broadcast rate/acre

Soil texture	Eastern US	Western US
Coarse	0.8 pts	0.8 pts
Medium	1.2 pts	1-1.2 pts
Fine	1.6 pts	1.2 pts
2 to 5% organic matter	1.2 pts	1.2-1.6 pts
5.1 to 10% organic matter	1.6 pts	1.6 pts

For direct-seeded tomatoes, apply and incorporate to soil between the rows and beneath the plants.

p. 34/37

 TREES AND VINEYARDS ✓

EASTERN US ✓

- For new planting of vineyards, citrus and pecan trees, apply and incorporate before planting at the following:

Broadcast rate/acre

Soil texture	
Coarse	0.8 pts
Medium	1.2 pts
Fine	1.6 pts
2 to 5% organic matter	1.2 pts ✓
5.1 to 10% organic matter	1.6 pts

- For Non-Bearing established plantings of citrus and pecan trees and bearing plantings of grapefruit, lemon, orange, pecan, tangelo, tangerine trees, apply at a broadcast rate/acre of 1.6 - 3.2 pts for all soil textures. Apply as directed spray to soil around the trees and use incorporation methods not injurious to the trees.
For continued weed control in citrus area, apply twice a year at an interval of approximately 4 to 6 months.

WESTERN US ✓

- For new plantings of almond, apricot, citrus, nectarine, peach, pecan, walnut trees, apply and incorporate before planting at the following:

Broadcast rate/acre

Soil texture	
Coarse	0.8 pts
Medium	1-1.2 pts
Fine	1.2 pts ✓
2 to 5% organic matter	0.8-1.2 pts
5.1 to 10% organic matter	1.6 pts

- For new plantings of vineyards, apply before planting at the following:

<u>Broadcast rate/acre</u>	
<u>Soil texture</u>	
Coarse	0.8-1.2 pts
Medium	1.2-2.4 pts
Fine	2.4-3.2 pts

Do not use more than 1.6 pts/acre on heat-treated vines.

- For post-plant applications on bearing and non-bearing established plantings of vineyards, almonds, apricot, grapefruit, lemon, nectarine, orange, peach, pecan, plum, prune, tangelo, tangerine and walnut trees, apply at a broadcast rate/acre of 1.6 - 3.2 pts for all soil textures. Apply as a directed spray to the soil around the trees or vines and use incorporation methods not injurious to the trees or vines.

Do not apply to vineyards within 60 days of harvest.

For continued weed control in citrus trees, apply twice a year at an interval of about 4 to 6 months.

Special application

- For Rhizome Johnsongrass control (Western US only)

Commercially acceptable control of Rhizome Johnsongrass can be obtained with post-plant applications in bearing and non-bearing established plantings of vineyards, almond, apricot, grapefruit, lemon, nectarine, orange, peach, pecan, tangelo, tangerines, walnut trees.

Work the soil thoroughly to bring the rhizomes nearer the surface. Apply for two years in a row at a broadcast rate/acre of 3.2 pts on all soil textures each year. Incorporate thoroughly with a disc set to cut 4 to 6 inches deep and operate 2 times at 4 to 6 mph.

Some Johnsongrass plants will escape. Timely cultivations are necessary.

Precautions: do not use the 1.6 qt rate on new plantings; do not interplant orchards or vineyards with other crops; if the treated vineyards and orchards are diverted to other crop uses, plant only those crops for which IPIFLUOR FIVE EC has been registered as a preplant treatment for the next cropping season.

- For Field Bindweed control in vineyards, almond, apricot, grapefruit, lemon, nectarine, orange, peach, pecan, tangelo, tangerine, walnut trees in California only.

Apply in the spring with a specially designed spray blade which applies at a soil depth of 4 to 6 inches at a broadcast rate/acre of 3.2 pts on all soil textures in 40-80 gallons of water/acre.

Destroy all weeds and grasses with soil tillage before applying.

Precautions: some soils develop cracks as they dry after rainfall or irrigation and Field Bindweed may emerge. Prevent or eliminate cracks by shallow disking or other tillage. ✓

WHEAT ✓

WINTER WHEAT grown in Idaho, Montana, Oregon and Washington. ✓

Apply any time during a period from 3 weeks up to immediately prior to planting at a broadcast rate/acre of 1.2 pts on coarse and medium soils and 1.6 pts on fine soils. ✓

Incorporate, with a flexible tine-tooth harrow set to cut 1 to 2 inches deep and operate at 3 to 6 mph, one time within 24 hours after application and a second time, in a different direction, prior to planting.

WINTER WHEAT fall soil application in Washington and Oregon. ✓

Apply any time from May to September prior to the fall planting at a broadcast rate/acre of 1.2 pts on coarse and medium soils and 1.6 pts on fine soil.

Incorporate, with a flexible tine-tooth harrow set to cut 1 to 2 inches deep and operate at 3 to 6 mph, one time within 24 hours after application and a second time, in a different direction, prior to planting.

SPRING WHEAT, DURUM, BARLEY ✓

Apply as a postplant incorporated treatment, after seeding but before the crop emerges, to control foxtail at a broadcast rate/acre of 0.8 pt on coarse and medium soils and 1.2 pts on fine soil.

Incorporate using a flex-tine or diamond harrows operating two times in different directions at 5 mph, 1 to 1½ inches deep.

Fall application ✓

Apply any time between October 15 and December 31 with a double incorporation: the first within 24 hours after application, the second prior to planting at a broadcast rate/acre of 0.8 pt on coarse and medium soils and 1.2 pts on fine soil. ✓

For the incorporation use: chisel plow (for the first pass only) operating at 4 to 6 mph, set to cut at 4-5 inches deep; tandem disc, operating at 4-6 mph, 3-4 inches deep; field cultivator, operating at 5 mph, 3-4 inches deep. ✓

SPECIAL PRECAUTIONS ✓

Applied according to directions and under normal growing conditions IPIFLUOR FIVE EC will not harm the treated crop. Over application may result in crop injury or a soil residue. Uneven application or improper soil incorporation can result in erratic weed control or crop injury.

Special precautions must be taken: ✓

- In the Western United States (Arizona, Colorado, California, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming): to avoid crop injury do not plant sugarbeets, red beets or spinach for 12 months after IPIFLUOR FIVE EC application or for 14 months after a fall application of the product.

Do not plant sorghum, corn, oats for 14 months after spring application or for 16 months after fall application. If land has not been irrigated, do not plant any of these crops for 18 months after spring application or for 20 months after fall application.

- In the Western United States (Kansas, Nebraska, North Dakota, Texas in those areas where at least 25 inches of irrigation or rainfall was used to produce the crop): do not plant sorghum or oats for 12 months after the herbicide application. If less than 25 inches of water was used to produce the crop, do not plant sorghum or oats for 18 months after application. Cool, wet weather conditions during the early stage of growth may increase the possibility of injury to sorghum.
- In the Eastern United States: moldboard plow before planting sugarbeets where spring application was made the previous season.
- In Florida only: do not plant vegetable crops other than those listed in the label within 5 months following the application of !PIFLUOR FIVE EC.

NOTICE OF WARRANTY

MPH Handel AG warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for the purposes stated on such label only when used in accordance with the directions under normal use conditions. It is impossible to eliminate all risks inherently associated with the use of the product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use application, all of which are beyond the control of MPH Handel AG.

In no case shall MPH Handel AG be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the buyer. MPH Handel AG makes no warranties of merchantability or fitness for a particular purpose nor any other express or implied warranty except as stated above.

SENCOR is a registered Trade Mark of Parent Co. of Farbenfabriken Bayer GmbH, Leverkusen.

KARMEX AND LEXONE are registered Trade Marks of E.I. Du Pont de Nemours & Co. Inc.

EP is a registered Trade Mark of Stauffer Chemical Co.

AMIBEN is a registered Trade Mark of Union Carbide Corp.

COTORAN and CAPAROL are registered Trade Marks of Ciba-Geigy Corp.

VADEX is a registered Trade Mark of Monsanto Co.

VERNAM is a registered Trade Mark of Stauffer Chemical Co.