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# Preview®

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## HERBICIDE



TRADEMARK

DISPERSIBLE GRANULES



# PREVIEW®

## HERBICIDE

271  
REGISTRATION CODE 1090-000

PACKAGE SIZE  
8 - 5 POUND JUGS/CARTON

DISPERSIBLE GRANULES

	BY WEIGHT
ACTIVE INGREDIENT .....	75%
Metribuzin [4-Amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4H)-one] .....	68.5%
Ethyl 2-[[[(4-chloro-6-methoxypyrimidin-2-yl)-amino]carbonyl]amino]sulfonylebenzoate .....	6.5%
INERT INGREDIENTS .....	25%
	TOTAL 100%
EPA Reg. No. 352-448	U.S. Patent 4,346,220; 4,547,215; 4,394,506 & 4,647,530

**KEEP OUT OF REACH OF CHILDREN**

### CAUTION

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION!** HARMFUL IF SWALLOWED. CAUSES MODERATE EYE INJURY.

Avoid breathing dust or spray mist. Avoid contact with eyes. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

#### STATEMENT OF PRACTICAL TREATMENT

**If in eyes:** Flush eyes with plenty of water. Call a physician if irritation persists.

**If swallowed:** Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

For medical emergencies involving this product, call toll free 1-800-441-3637.

#### ENVIRONMENTAL HAZARDS

Do not apply directly to water or wetlands. Do not contaminate water by cleaning of equipment or disposal of wastes.

#### IMPORTANT

Injury to or loss of desirable trees or vegetation may result from failure to observe the following: Do not apply or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Do not use on lawns, walks, driveways, tennis courts or similar areas. Prevent drift of spray to desirable plants. Do not contaminate any body of water. Keep from contact with fertilizers, insecticides, fungicides and seeds during storage.

Thoroughly clean all traces of "Preview" from application equipment immediately after use and prior to spraying crops other than soybeans. Failure to remove even small amounts of "Preview" from application equipment may result in injury to subsequently sprayed crops.

Prior to using "Preview", consideration should be given to crop rotation plans. Crops other than soybeans can be extremely sensitive to low concentrations of "Preview" remaining in the soil the next planting season. Choice of rotational crop is restricted following application of "Preview". (See "ROTATIONAL CROP GUIDELINES".)

Do not apply if soil pH is greater than 6.8.

Metribuzin is a chemical which can travel (seep or leach) through soil and can contaminate groundwater which may be used as drinking water. Metribuzin has been found in groundwater as a result of agricultural use. Users are advised not to apply metribuzin where the water table (groundwater) is close to the surface and where the soils are very permeable, i.e., well drained soils such as loamy sands. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

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## DIRECTIONS FOR USE

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

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

### FOR USE ON SOYBEANS ONLY.

## General Information

Du Pont "Preview" Herbicide is a dispersible granule formulation to be mixed with water and sprayed for selective preemergence and preplant incorporated weed control in soybeans. When applied according to the instructions on this label, it will control many broadleaf weeds and provide partial control of nutsedge.

Preplant incorporated and preemergence applications of "Preview" require rainfall or sprinkler irrigation to activate the herbicide. Degree of control and duration of effect depend on: Rate used, weed spectrum, growing conditions at and following time of treatment, soil pH, texture, organic matter, moisture and precipitation.

Because most crops are highly sensitive to "Preview" all direct or indirect contact (such as spray drift) to crops or to land scheduled to be planted to crops other than soybeans should be avoided.

## Biological Activity

"Preview" rapidly inhibits the growth of susceptible weeds. Following activation of preplant incorporation or preemergence treatment, susceptible weeds may germinate and emerge, but growth then ceases and leaves become yellow 3-5 days after emergence. Death of leaf tissue and growing point will follow in some species while others will remain green but stunted and noncompetitive. "Preview" provides partial control of some annual grasses when used preplant or preemergence but other products may be needed to ensure adequate grass control.

## Weeds Controlled

When used as directed "Preview" will provide **control** of the following weeds:

Carpetweed	Prickly sida (teaweed)
Cocklebur*	Purslane
Hophornbeam copperleaf	Ragweed, common
Jimsonweed	Smartweeds, annual
Lambsquarters	Spotted spurge
Mustards	Sunflower*
Pigweed species	Velvetleaf
Palmer amaranth	
Redroot	
Smooth	
Spiny amaranth	
Tall waterhemp	

When used as directed "Preview" will provide **partial control** of the following weeds:

Burcucumber	Morningglory, annual*
Crabgrass species	Tall
Eastern black nightshade	Trifoliate
Foxtail species	Pitted
Johnsongrass, seedling	Entireleaf
	Nutsedge species
	Panicum species
	Ragweed, giant*

\* Large seeded weeds, germinating deep in the soil, such as morningglory, sunflower, cocklebur and giant ragweed or weeds with subsequent flushes may require a cultivation or postemergence application of Du Pont "Classic" Herbicide for season-long control. Consult "Classic" label for application directions and use restrictions.

**NOTE:** Consult "Lasso", "Dual", "Prowl", "Treflan", "Sonalan", "Surflan", or "Command" labels for additional weeds controlled when "Preview" is used in conjunction with these herbicides.

## APPLICATION INFORMATION

### Spray Tank Preparation

It is important that spray equipment is clean and free of existing pesticide deposits before using "Preview". Follow the spray tank cleanout procedures specified on the label of product previously sprayed. If no cleanout procedure is provided, follow the cleanout procedure below for all application equipment.

1. Thoroughly rinse sprayer, tanks, boom, and hoses with clean water.
2. Partially fill the tank with water and add one of the cleaning agents listed in the SPRAYER CLEANUP section of this label. Complete filling the tank and flush the cleaning solution through the boom and hoses. Let stand for 15 minutes with agitation or recirculation and then drain the tank after flushing the hoses, boom, and nozzles.
3. Thoroughly rinse sprayer, tanks, boom, and hoses with clean water.
4. Follow label directions of the product previously sprayed for rinsate disposal.

**Notes:** During an extended period where spraying or mixing equipment will be used to apply multiple loads of "Preview", at the end of each day of spraying partially fill the tank with fresh water, flush the boom and hoses and allow to sit overnight.

A steam cleaning of aerial spray tanks is recommended to dislodge any visible pesticide deposits.

### Equipment / Spray Volumes

**GROUND APPLICATION:** Apply uniformly by ground equipment with a properly calibrated low pressure (20 to 40 psi) fixed-boom sprayer equipped with fan-type nozzles or other carefully calibrated nozzles and screens no finer than 50 mesh. Use 10 to 40 gals of water per acre. Continuous agitation in the spray tank is required to keep the material in suspension. Avoid overlap and shut off spray booms while starting, turning, slowing or stopping, as injury to the crop may result.

**AERIAL APPLICATION:** "Preview" may be applied by air for early preplant, preplant incorporated or preemergence use on soybeans. Apply uniformly with properly calibrated aerial equipment. Use a minimum of 2 gallons of water per acre. Avoid over applying of spray swath. Continuous agitation of the spray tank is required to keep the material in suspension.

Do not allow spray to drift onto adjacent crops or land as injury to other plants may occur. To avoid drift, applicators must observe the following precautions:

- Do not spray when wind speeds exceed 10 mph
- Do not spray when winds are gusty.
- Do not spray when a temperature inversion exists
- Use nozzles which produce a coarse spray. Nozzles should be oriented in the direction of the air stream. Do not exceed 40 psi

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## Mixing Instructions

Fill tank 1/4 full with water. Start agitation system, add "Preview" and continue adding water. Add separately each additional component of any tank mix while adding water. Continue agitation throughout. If poor mixing should occur with any component, premix the component with two parts water before adding to the spray tank. A fertilizer solution may be used in the spray mixture. Small quantities should be tested for compatibility by the following procedures before full scale mixing.

1. Put 1 pint of fertilizer solution in quart jar.
2. Mix 2 teaspoons "Preview" with 2 tablespoons of water; mix thoroughly and add to fertilizer solution.
3. Close jar and shake well.
4. If other herbicides are to be used in the mixture, premix 2 teaspoons of wettable powders or 1 teaspoon of liquids with 2 tablespoons of water; add to "Preview" fertilizer solution mixture.
5. Close jar and shake well.
6. Watch mixture for several seconds; check again in 30 minutes.
7. If mixture does not separate, foam, gel or become lumpy, it may be used.
8. Mixing ability may be improved by adding compatibility agents such as Kalo Laboratories "Complex"[8] or Witco Chemicals "Sponto"[9] 168D. Follow directions on container.

Provided the above procedure shows the mixture to be compatible, prepare the tank mixture as follows: Add the fertilizer solution to the spray tank first; with the agitator running, add the required amount of "Preview" and thoroughly mix. For tank mixtures with other herbicides, follow directions above.

Use "Preview" spray preparations the same day as mixed or product degradation may occur. Thoroughly reagitate before using if allowed to settle.

When tank mixing with other herbicides, all applicable directions, restrictions and precautions for the additional herbicides are also to be followed.

## APPLICATION METHODS

Dosage rates listed are broadcast rates. For band applications use proportionally less.

Plant seed 1 1/2" to 2" deep on a flat or raised seedbed only, or crop injury may occur.

Soybean stunting may occur if rainfall is excessive during soybean germination and emergence. Injury is more prevalent under poor drainage or compacted conditions or when soil is saturated for long periods of time. Soybeans outgrow stunting once favorable growing conditions return.

Soybean varieties such as Altona, Coker 6995 and 156, Govan, Semmes, Tracy, Vansoy, Terra Vig 505 and 606, AP 71, NKS 1884, Agropuro 55, Asgrow 6520, Maple Amber, Portage, and Vinton 81 are more sensitive to "Preview". Injury may occur if "Preview" is used on these varieties. Before use on any soybean variety, tolerance to "Preview" must first be determined. Injury to soybeans may occur if "Preview" is used on soils having a calcareous surface layer, or if used in conjunction with soil-applied organic phosphate pesticides such as "Dasanit", "Disyston", "Mocap", "Nemacur", "Thimet", parathion or "Lorsban"

**NOTE:** Injury may occur if atrazine was applied on the soil the year before use of "Preview". Seedling disease, cold weather, deep planting (more than 2"), excessive moisture, high salt concentration or drought may weaken soybean seedlings and increase the possibility of crop injury

## Early Preplant or Preplant Incorporated(See Rate Table 1)

"Preview" can be applied at planting or up to 30 days prior to planting either preemergence or preplant incorporated. If incorporated, uniformly incorporate the treatment no deeper than the top 1-2" of soil prior to planting soybeans. Use equipment suited to proper incorporation into the top 1-2 inches of soil, eg: Do-all, field cultivator, rotterra. "Preview" can be tank mixed with "Command" and applied preplant incorporated. Refer to the "Command" label for specific use instructions. If tank-mixed with a grass herbicide such as a DNA like "Trellan", "Sonalan", or acetanilide such as "Dual", or "Lasso", follow label instructions for proper incorporation of the grass herbicide into the top 1 to 2 inches of soil. Improper soil incorporation can result in erratic weed control or crop injury. Rainfall (~1") is required to activate preplant incorporated herbicides such as "Preview" before weed emergence.

"Preview" + "Trellan", "Prowl", "Dual" or "Sonalan" -- Apply within 2 weeks of planting.

"Preview" + "Trellan" (Early PPI) -- Apply within 30 days of planting.

"Preview" + "Lasso" -- Apply within 7 days of planting.

"Preview" + "Command" -- Apply within 30 days of planting.

## Preemergence (See Rate Table 1)

Preemergence application: Apply before soybeans emerge. Do not spray overtop of emerged soybeans, as severe injury or death of crop will occur.

Preemergence activity of "Preview" requires rainfall\* to activate. Best results are obtained if treatment is made to moist soil and followed by rainfall or irrigation (~1") before weeds germinate. On dry soil, more moisture is required for activation (1 to 2") before weed emergence. If moisture is insufficient to activate the herbicide, a rotary hoeing or shallow cultivation should be made after emergence of crop while weeds are small enough to be controlled by mechanical means. "Preview" can be applied preemergence in combination with "Lasso", "Dual", "Prowl", "Surflan" or following the use of a preplant grass material such as "Trellan" or "Sonalan". Consult labels for rates and use instructions.

\*Rainfall required to activate ppi or pre treatments depends on soil moisture when activating moisture is received. Several small rainfalls of less than 1/4" are not as beneficial as one large rain of 1/2 inch or more for activation.

## Minimum Tillage or No-Till (See Rate Table 1)

"Preview" applied preemergence to soybeans but postemergence to broadleaf weeds and small annual grasses will provide some burndown of existing weeds as well as normal preemergence broadleaf weed control. When used for burndown, add 0.25% v/v (1 qt./100 gal.) surfactant such as Surfactant VSK or crop oil concentrate at 1% v/v (1 gal/100 gal). For added postemergence control, especially on grasses, "Preview" can be applied with "Roundup", paraquat, or "Bronco". For added preemergence grass control, "Preview" can be mixed with "Dual", "Surflan" or "Lasso". Consult labels for rates and use instructions. Maintain constant agitation of spray mixture.

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Rate Table 1		
Soil Texture Description	Ounces of "Preview" per Acre	
	Percent Organic Matter in Soil*	
	1/2 - 3%	3 - 5%
<b>Coarse:</b> Loamy sand, Sandy loam	6	7
<b>Medium:**</b> Loam, Silty loam, Silt	7	8
<b>Fine:</b> Silty clay loam, Clay loam, Clay	8	9-10

\*Do not apply to soil with less than 1/2% O.M. Do not apply "Preview" to soils with pH greater than 6.8.

\*\*For medium soils 1 1/2 to 3% O.M. in MO and KS, use 7-8 oz./A.

### Reduced Rate Followed by Classic® Herbicide

"Preview" may be applied preplant incorporated or preemergence at reduced rates when followed by "Classic" Herbicide postemergence for broadleaf weed control in soybeans. This treatment will control these broadleaf weeds listed on the "Preview" and "Classic" Herbicide product labels.

Apply "Preview" at reduced rates (see rate table below) preplant incorporated or preemergence as directed on this product label. Follow the "Preview" preplant incorporated or preemergence reduced rate with a postemergence application of "Classic" Herbicide at its labeled rate when weeds are small and actively growing. (Usually 14-28 days after preplant incorporated or preemergence application of "Preview" reduced rate).

For grass weed control "Preview" can be applied in tank mix with "Lasso", "Dual", "Prowl", "Treflan" or "Sonalan". Read and follow the product label for use of these products.

"Preview" Reduced Rate Table		
Soil Texture Description	Ounces of "Preview" per Acre	
	Percent Organic Matter in Soil*	
	1/2 - 3%	3 - 5%
<b>Coarse:</b> Loamy sand, Sandy loam	5	6
<b>Medium:</b> Loam, Silty loam, Silt	6	7
<b>Fine:</b> Silty clay loam, Clay loam, Clay	7	8

\* Do not apply to soil with less than 1/2% O.M.  
Do not apply "Preview" to soils with pH greater than 6.8.

### "Preview" plus Lorox Plus® Herbicide Tank Mix for the States of IA, IL, IN, MI and OH.

A tank mix, at reduced rates, of "Preview" and "Lorox Plus" Herbicide is recommended for weed control in soybeans in the states of Iowa, Illinois, Indiana, Michigan and Ohio. This tank mix will control those weeds listed on this label.

Apply the "Preview" and "Lorox Plus" tank mixture as a preplant incorporated (1-2 inches) or preemergence treatment. Follow the "Lorox Plus" label for incorporation guidelines and equipment recommendations. Make a single application using 10-40 gallons of water per acre by ground equipment only. DO NOT APPLY "LOROX PLUS" BY AIR.

Choose the proper rates from the rate table below.

Important: Read and follow all use precautions, restrictions and recropping guidelines on the "Lorox" Plus and "Preview" product labels.

"Preview" plus "Lorox Plus" Rate Table		
Soil Texture Description *	Ounces Product Per Acre	
	"Preview"	"Lorox Plus"
<b>Coarse:</b> Loamy sand, Sandy loam	3	6
<b>Medium:</b> Loam, Silty loam, Silt	3.5	7
<b>Fine:</b> Silty clay loam, Clay loam, Clay	4	8

\* Do not apply to soil with less than 1/2% or more than 3 1/2% organic matter. Do not apply to soils with pH greater than 6.8.

### ROTATIONAL CROP GUIDELINES

Crops that can be planted after using "Preview" are listed below. Choice of rotational crop is determined by time interval elapsed since last application.

Crops	Time Interval in Months Before Replanting
Soybeans	Anytime
Wheat, Barley, Ryegrass	4
Field Corn *	10
Alfalfa	10
Dry beans	12
Sorghum	12
Clover	12
Tobacco (transplant)	10
Tomato (transplant)	10

All other crops require a successful field bioassay. \*\*  
The suggested interval before initiating a field bioassay is 10 months

The term, "FIELD CORN" is defined to include only that corn grown for grain or silage, popcorn, and seed corn relative to the "Rotational Crop Guidelines" section of the label, but because seed corn inbred lines may vary in their sensitivity to trace amounts of herbicide carryover Du Pont cannot warrant that seed corn can be recropped without damage or yield loss. Users are advised to seek the advice of their seed corn company agronomist regarding inbred sensitivity to herbicides prior to planting any inbred lines.

\*\* Field Bioassay - The season before planting any crop not listed above, a successful field bioassay must be completed. The field bioassay will detect small quantities of "Preview" which can remain in the soil and injure rotational crops. A successful field bioassay means growing to maturity a test strip of the crop(s) intended for production the following year. The test strip should cross the whole field including knolls and low areas.

Combination Treatment: When recommended tank mix combinations are used, consult the product label for replanting and recropping instructions and observe the directions that are the most restrictive.

## SPRAYER CLEANUP

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of "Preview" as follows:

1. Drain tank; thoroughly hose down the interior surfaces of the tank; then flush tank, boom, and hoses with clean water for a minimum of 5 minutes.
2. Partially fill the tank with water and add one of the cleaning agents listed below. Complete filling the tank with water, then flush the cleaning solution through the boom, hoses, and nozzles. Add water to completely fill the tank and allow to agitate or recirculate for at least 15 minutes. Again, flush the boom, hoses and nozzles, and drain the tank.
3. Repeat Step 2.
4. Remove the nozzles and screens and clean separately in a bucket containing water and the cleaning agent.
5. Thoroughly rinse the tank with clean water for a minimum of 5 minutes, flushing water through the boom and hoses.

NOTE: Use any of the following cleaning agents. Carefully read and follow the individual cleaning agent instructions.

1. One gallon of household ammonia (contains 3% active) per 100 gallons of water.
2. Nutra-Sol<sup>®</sup>
3. Loveland Tank and Equipment Cleaner<sup>™</sup>
4. Protank Cleaner<sup>™</sup>
5. Chem-Tank Cleaner and Neutralized<sup>™</sup>
6. Incide-Out<sup>™</sup>
7. Tank-Aid<sup>™</sup>

\*A steam cleaning of fiberglass or stainless steel aerial spray tanks is recommended prior to performing the above cleanout procedure to facilitate the removal of any caked deposits.

## PRECAUTIONS

Do not apply "Preview" Herbicide to soils with a pH greater than 6.8.

- o CAUTION: Soil pH varies greatly, even within the same field. pH variations as much as 2 pH units are common. Composite soil samples taken across an entire field, such as those samples taken for soil fertility recommendations, may not detect areas of high pH (greater than pH 6.8). Sub-sampling areas likely to have pH values higher than the field average is recommended.

Soil pH may vary with soil type. Where different soil types are evident within a field, these types should be sampled separately.

Soil pH may vary due to conditions within a field. Such areas include, but are not limited to, areas bordered by limestone gravel roads, river bottoms subject to flooding, low areas in hardpan soils where evaporative ponds may occur, eroded hillsides, along drain tile lines, and areas where drainage ditch spoil has been spread. These areas should be sampled separately.

Soil pH may vary within the soil profile. For instance, fields in which lime has not been deeply incorporated may exhibit significantly higher pH values in the upper 3 inches of soil. Composite soil samples taken at a 6-8 inch depth may not reflect the elevated pH near the surface. In these cases shallow sampling, the upper 3 inches, is advised.

Determine soil pH by laboratory analysis using a 1:1 soil:water suspension.

- o Do not graze treated fields or harvest for forage or hay
- o Use of "Preview" may affect rotational crops. Follow "ROTATIONAL CROP GUIDELINES".
- o Do not use on sand, muck, or peat soils, nor on soils with less than 1/2% organic matter, as crop injury may occur.
- o Do not apply "Preview" after the soybean crop has emerged
- o If "Scepter", "Pursuit" or any product containing the active ingredients imazaquin or imazethapyr (such as "Squadron", "Partner") is applied the same year as "Preview", do not plant crops other than soybeans for at least 15 months from the last application. Crops listed in the "Preview" Rotational Crop Guidelines may be planted after 15 months; all other crops require a successful field bioassay.
- o Do not apply to land that has been or will be treated with "Ally", "Glean" or "Finesse" herbicides in the states of Nebraska, Kansas, North Dakota and South Dakota.

## STORAGE AND DISPOSAL

**Storage:** Store product in original container only, away from other pesticides, fertilizer, food or feed

**Product 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:** 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.

### NOTICE OF WARRANTY

Du Pont 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 this 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 or application, all of which are beyond the control of Du Pont. In no case shall Du Pont be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks are assumed by the buyer. DU PONT MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

- 1 Trademark of Elanco Products Co., Indianapolis, IN
- 2 Trademark of Ciba-Geigy Corp., Greensboro, NC
- 3 Trademark of Monsanto Agricultural Products Co., St. Louis, MO
- 4 Trademark of American Cyanamid Corp., Princeton, NJ
- 5 Trademark of Mobay Chemical Corp., Kansas City, MO
- 6 Trademark of Rhone-Poulenc, Inc., Monmouth Junction, NJ
- 7 Trademark of Dow Chemical Co., Midland, MI
- 8 Trademark of Kalo Agricultural Chemicals, Inc., Overland Park, KS
- 9 Trademark of Witco Chemical Corp., Houston, TX
- 10 Trademark of FMC Corp., Philadelphia, PA
- 11 Compounded for Thomas G. Killoil Co., Inc., San Bruno, CA
- 12 Trademark of Loveland Industries, Inc.
- 13 Manufactured for Genex/Land 'O Lakes Agronomy Co
- 14 Manufactured by Farmbelt Chemicals, Inc.
- 15 Trademark of Precision Laboratories, Inc
- 16 Manufactured for Cornbelt Chemical Co

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