

PM

23

OCT 30 1997

Callista O. Chukwunenye
FMC Corporation
Agricultural Products Group
1735 Market Street
Philadelphia, PA 19103

Dear Dr. Chukwunenye:

SUBJECT: Label Amendment
Authority TM 75 DF Herbicide
EPA Registration No. 279-3148
Your Application Dated August 7, 1997

The labeling referred to above, submitted in accordance with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended is acceptable with the following provisions:

1. The following statement was deleted from the section under "For Use on Soybeans Only": **"Do not apply this product through any type of irrigation system."** The statement should be moved back to this area of the labeling. It is noted that it appears on page 6 of the proposed labeling, therefore you may delete it from this section if you don't want it to appear twice on the labeling.
2. Under the section "For Use on Soybeans Only", delete the sentence that reads, **"Do not apply more than 4 ounces of Authority 75 DF per acre per season."** The sentence is misleading in that it implies that one can apply less than 4 ounces more than once per season. Replace it with the original sentence on the approved labeling (of 6/6/97) which reads: **"Do not apply Authority 75 DF more than once per season."**

A stamped copy is enclosed for your records. Please submit one (1) final printed copy for the above mentioned label before releasing the product for shipment.

Sincerely yours,

Joanne I. Miller
Product Manager (23)
Fungicide-Herbicide Branch
Registration Division (7505C)

Enclosure

CONCURRENCES								
SYMBOL ▶	7505C							
SURNAME ▶	DMorgan							
DATE ▶	Nov 3, 1997							

AUTHORITY™75DF

Herbicide

Dispersible Granules

<i>Active Ingredients</i>	<i>By Weight</i>
Sulfentrazone	
N-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]phenyl]methanesulfonamide	75%
<i>Inert Ingredients</i>	25%
TOTAL	100%

EPA Reg. No. 279-3148



FMC Corporation
 Agricultural Products Group
 Philadelphia PA 19103
 8/97 draft

ACCEPTED
 with COMMENTS
 in EPA Letter Dated

OCT 30 1997

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

279-3148

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

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. If person is unconscious, do not give anything by mouth or induce vomiting.

If inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

If on skin: Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.

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

For medical emergencies involving this product, call toll-free 1-800-4331-3148.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes moderate eye irritation. Harmful if swallowed, inhaled, or absorbed through skin. Avoid breathing dust, vapor or spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT

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

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

ENGINEERING CONTROL STATEMENTS

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to marine/estuarine invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to terrestrial and aquatic plants in neighboring areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

Groundwater label advisory: This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

Do not use on coarse soils classified as sand which have less than 1 % organic matter.

Surface water advisory: Sulfentrazone can contaminate surface water through spray drift. Under some conditions, sulfentrazone may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), 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 over-lying tile drainage systems that drain to surface waters.

PHYSICAL/CHEMICAL HAZARDS

Do not use or store near heat or open flame.

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.

Prior to using Authority 75DF herbicide, consideration should be given to crop rotation plans. Crops other than soybeans may be extremely sensitive to low concentrations of Authority 75DF remaining in the soil the next planting season. Choice of rotation crop is restricted following application of Authority 75DF. (See "ROTATIONAL CROP GUIDELINES" for your geographical region.)

Thoroughly clean Authority 75DF from application equipment immediately after use and prior to spraying crops other than soybeans. Failure to remove even small amounts of Authority 75DF from application equipment may result in injury to subsequently sprayed crops.

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

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.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over long-sleeved shirt and long pants.
- Waterproof gloves.
- Shoes plus socks.

FOR USE ON SOYBEANS ONLY

Do not apply aerially.

Do not feed treated soybean forage or soybean hay to livestock

Do not apply more than 4 ounces of Authority 75DF per acre per season.

GENERAL INFORMATION

Authority 75DF Herbicide is a dispersible granule formulation, premeasured in a 1 pound soluble pack, to be mixed with water and sprayed for selective preemergence weed control in soybeans. When applied according to the instructions on this label, it will control nightshade and waterhemp species.

Preemergence and preplant incorporated applications of Authority 75DF 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.

This label contains specific use directions for distinct geographical use areas for Authority 75DF. The States are defined under USE RATES. This label also contains general use information which is applicable to all Authority 75DF use geography.

BIOLOGICAL ACTIVITY

Authority 75DF rapidly inhibits the growth of susceptible weeds. Following application of a preplant incorporated 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.

Authority 75DF will suppress some annual grasses when used preplant or preemergence but other products will be needed to ensure adequate grass control.

Poor growing conditions such as excessive moisture, cool temperatures, and soil compaction or the presence of various pathogens may impact seedling vigor. Under these conditions the active ingredients in Authority 75DF, like other soil applied herbicides, can injure soybeans. However, these early injury symptoms are short lived and do not result in yield reductions.

RAINFALL ACTIVATION FOR PREEMERGENCE ACTIVITY

Best results are obtained if Authority 75DF is applied to moist soil and followed by rainfall or irrigation (~1") before weeds germinate. Several small rainfalls of less than 1/4" each are not as beneficial as one large rainfall of 1/2-1". On dry soil, more moisture is required for activation (1-2") before weed emergence. If moisture is insufficient to activate the herbicide, a rotary hoeing or shallow cultivation should be made after emergence of the crop while weeds are small enough to be controlled by mechanical means.

APPLICATION METHODS

Do not apply Authority 75DF after the soybean crop has emerged or severe injury or death of the crop will occur.

Authority 75DF may be applied by any of the methods listed below. These methods apply to Illinois, Indiana, Iowa, Michigan, Minnesota, Nebraska, Ohio, South Dakota and

Wisconsin only.

PREPLANT INCORPORATED

Uniformly incorporate Authority 75DF or Authority 75DF tankmixes 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, e.g.: Do-all, field cultivator, or rotterra. Authority 75DF can be tank mixed with "Command 4EC" and applied preplant incorporated. Refer to the "Command" label for specific use instructions. If tank-mixed with a grass herbicide such as a Dinitroaniline (DNA) like "Treflan", "Sonalan", or "Prowl" or an acetanilide such as "Dual", "Frontier", or "Lasso", follow label instructions for proper incorporation of the grass herbicide into the top 1 to 2" of soil. Improper soil incorporation can result in erratic weed control or crop injury. If soil is dry, rainfall (~1") is required to activate preplant incorporated herbicides such as Authority 75DF before weed emergence.

NOTE: Consult Lasso¹, Dual², Frontier³, Prowl⁴, Treflan⁵, Sonalan⁵, or Command⁶ labels for additional weeds controlled, use rates and instructions, when Authority 75DF is used in conjunction with these herbicides.

PREEMERGENCE

Authority 75DF can be applied preemergence in combination with such herbicides as "Command 3ME", "Lasso", "Dual", "Frontier", "Prowl" or following the use of a preplant incorporated grass herbicide such as "Treflan" or "Sonalan". Consult labels for rates and use instructions.

AUTHORITY 75DF + MATADOR TANKMIXES FOR EARLY PRE-PLANT BURNDOWN OF GRASSES IN SOYBEANS IN NO-TILL

Authority 75DF may be tankmixed with Matador⁶ herbicide or MATADOR + 2,4-D LVE to provide early pre-plant burndown control of small foxtails, fall panicum, barnyardgrass, volunteer corn, shattercane, and wild proso millet.

For grass up to 3" in height, use 2.5 oz MATADOR per acre.

For grass >3" up to 5" in height, use 5 oz MATADOR per acre.

Timing of Applications

- Authority 75DF + MATADOR tankmix may be applied from no more than 30 days before planting up to just before soybean emergence.

Authority 75DF + MATADOR + 2,4-D LVE tankmix may be applied between 7 days and no more than 30 days before planting, but no earlier than 30 days before planting, depending on the rate of 2,4-D LVE used.

Consult the 2,4-D label for the appropriate pre-plant interval based on the rate used.

To apply Authority 75DF + MATADOR tankmixes:

- use flat fan nozzles only.
- must include a petroleum based crop oil concentrate at a rate of 1 gallon per 100 gallons of spray solution (1% v/v).
- an ammonium nitrogen fertilizer may be added but is not required for performance.

PREEMERGENCE FOLLOWED BY POSTEMERGENCE: Planned Program

For best results Authority 75DF herbicide is recommended in a planned program applied preplant burndown, preplant incorporated, or preemergence to be followed by postemergence applications of either RELIANCE STS, RELIANCE STS SP, SYNCHRONY STS, SYNCHRONY STS DF OR SYNCHRONY STS SP.

This program is recommended for use only on soybean varieties designated "STS".

USE RATES

AREA 1.

Iowa, Minnesota, Nebraska, South Dakota and Wisconsin

Pre-plant Burndown, Pre-plant Incorporated, or Preemergence

Apply Authority 75DF herbicide at 4 ounces per acre (1 soluble pack per 4 acres) for nightshade and waterhemp species.

Postemergence

Apply either RELIANCE STS or RELIANCE STS SP at a rate of 0.5 ounces per acre.†

WEEDS CONTROLLED

When used as directed, Authority 75DF herbicide followed by either RELIANCE STS or RELIANCE STS SP will provide control of the following species:

- | | |
|---|-------------------|
| Annual Smartweed | Nightshade, Hairy |
| Cocklebur | Pigweed |
| Common Milkweed
(above ground portion) | Redroot |
| Common Ragweed | Smooth |
| Jimsonweed | Sunflower |
| Lambsquarters | Velvetleaf |
| Marestail | Waterhemp, common |
| Nightshade, Black | Waterhemp, tall |
| Nightshade, Eastern Black | |

Weeds Suppressed

- | | |
|-----------------------|-----------------|
| Morningglory (annual) | Yellow Nutsedge |
| Entireleaf | |
| Ivyleaf | |
| Pitted | |
| Smallflower | |
| Tall | |

† Refer to either the RELIANCE STS or RELIANCE STS SP labels for appropriate postemergence application timing, weed stage and specific adjuvants.

AREA 2

Illinois, Indiana, Iowa (Fields located outside the boundaries of the Clarion-Nicollet-Webster and Hamburg-Ida-Monona soil associations and fields located outside the historic flood plain of the Missouri River), Michigan (Fields south of Interstate 96), Nebraska (Fields south of Route 30 and east of Route 281.) and Ohio.

Pre-plant Burndown, Pre-plant Incorporated, or Preemergence

Apply Authority 75DF herbicide at 4 ounces per acre (1 soluble pack per 4 acres) for nightshade and waterhemp species.

Postemergence

Apply either SYNCHRONY STS at 0.85 ounces per acre (1 soluble pack per 4 acres), or SYNCHRONY STS DF at 0.5 ounces per acre, or SYNCHRONY STS SP at 0.5 ounces per acre (1 soluble pack per 4 acres).†

WEEDS CONTROLLED

When used as directed, Authority 75DF herbicide followed by either SYNCHRONY STS, SYNCHRONY STS DF or SYNCHRONY STS SP will provide control of the following species:

Beggarticks (Bidens sp)	Mustard
Bristly Starbur	Nightshade, Black
Burcucumber*	Nightshade, Eastern Black
Cocklebur	Nightshade, Hairy
Common Milkweed	Pigweeds
(above ground portion)	Redroot (Rough)
Cowpea	Smooth
Florida Beggarweed	Ragweed
Florida Pusley	Common
Hemp Sesbania	Giant*
Lambsquarters	Sicklepod*
Jerusalem Artichoke	Smartweed
(above ground portion)	Ladysthumb
Jimsonweed	Pennsylvania
Marestail	Sunflower
Morningglory* (annual)	Wild Poinsettia
Entireleaf	Yellow Nutsedge
Ivyleaf	Velvetleaf
Pitted	Waterhemp, common
Smallflower	Waterhemp, tall
Tall	

* See Split Applications section of SYNCHRONY STS labels.

Weeds Suppressed

Buffalobur	Spurred Anoda
Canada Thistle	Purple Nutsedge
Kochia	Venice Mallow

† Refer to either the SYNCHRONY STS, SYNCHRONY STS DF or SYNCHRONY STS SP labels for appropriate postemergence application timing, weed stage and specific adjuvants.

ROTATIONAL GUIDELINES FOR ALL AUTHORITY 75DF APPLICATIONS

When used as described, the table describes the minimum length in months from the time of Authority 75DF application until Authority 75DF treated soil can be replanted to the crops listed in the table. When a recommended tank mix is used, consult the tankmix partner labels for recropping instructions and follow the directions that are most restrictive.

ROTATIONAL GUIDELINE

ALL LABELED AUTHORITY 75DF USES

(All uses of Authority 75DF as described in this label : including Authority 75DF Sequentials with Post products)

For the Midwest States : IA, IL, IN, MI, MN, NE, OH, SD, and WI.

Crop	Recropping Interval in Months
Soybeans †	Anytime
Wheat	4
Alfalfa , Barley, Ryegrass,	12
Rice	10
Sorghum,	10
Field Corn *	10
Dry Beans	12
Clover, Cotton, Cucumber, Flax, Pumpkin, Sunflower, Sweet Corn, Watermelon, Cabbage, Lentils, Mustard	18‡
Canola (rapeseed), Carrot, Onion, Potato, Sugar Beets and any other crop not listed	30‡

* Field Corn is defined to include only that corn grown for grain or silage, popcorn, and seed corn.

† Do not feed treated soybean forage or soybean hay to livestock.

‡ Crops that have rotational intervals greater than 12 months after a Authority 75DF application are the result of crop injury concerns.

APPLICATION INFORMATION

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 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.

SPRAY TANK PREPARATION

It is important that spray equipment is clean and free of existing pesticide deposits before using Authority 75DF. Follow the spray tank cleanout procedures specified on the label of product previously sprayed. If no cleanout procedure is provided, follow the cleanout procedure in SPRAYER CLEANUP section of this label.

Mixing Instructions

Soluble Packs are contained in waterproof, resealable plastic bags, with plastic bags enclosed in a cardboard box. The individual Soluble Packs will dissolve completely in water. Open the outer resealable plastic bag, remove the number of 1 pound Soluble Packs required for the application at a rate based on soil type and drop them into the spray tank as directed below.

DO NOT attempt to open or use partial Soluble Packets.

Soluble Pack Handling Precautions:

The outer resealable plastic bag is NOT soluble in water. DO NOT place it in the spray tank.

Excessive handling of the packs, or exposure to moisture, will cause breakage.

Do not touch the packs with wet hands or place them on wet surfaces.

Protect unused Soluble Packs by resealing them in the resealable bag.

To Use the Soluble Packs:

1. Fill the tank 1/4 to 1/3 full of water.
2. While agitating, add the required number of Authority 75DF Soluble Packs (1 pound per Soluble Pack).
3. The packs should dissolve completely within 5 minutes. Continue adequate agitation.
4. Authority 75DF should be thoroughly mixed with water in the spray tank before adding any other material. As the tank is filling and after the Soluble Packs have dissolved, add (in order): other herbicide(s), the required spray adjuvant, and the nitrogen fertilizer where required.
5. Apply Authority 75DF spray preparation within 24 hours of mixing to avoid product degradation, settling and difficulty in resuspending.
6. If the mixture has settled, thoroughly reagitate before using.

Proper Handling Instructions

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 ft 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 wash-water, 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 least 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 well-head setbacks and operational containment.

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

Do not use flood irrigation to apply or incorporate this product.

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.

SPRAYER CLEANUP

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of Authority 75DF 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. Remove the nozzles and screens and clean separately in a bucket containing water and the cleaning agent.
4. Repeat Step 2.
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-Sol⁷
3. Loveland Tank and Equipment Cleaner⁸
4. Protank Cleaner⁹
5. Chem-Tank Cleaner and Neutralizer¹⁰
6. Incide-Out¹¹
7. Tank-Aid¹²

*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.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets (>150 - 200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. **APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS!** See **Wind, Temperature and Humidity**, and **Temperature Inversions** sections of this label.

Controlling Droplet Size - General Techniques

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. **WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.**
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

BOOM HEIGHT

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

WIND

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. **AVOID GUSTY OR WINDLESS CONDITIONS.**

Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of

evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion.

Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud.

Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

AIR ASSISTED GROUND FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

Note: Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.

RESISTANCE MANAGEMENT

When herbicides with the same mode of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant weed biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. These resistant weed biotypes may not be adequately controlled. Cultural practices such as tillage, preventing weed escapes from going to seed, and using herbicides with different modes of action within and between crop seasons can aid in delaying the proliferation and possible dominance of herbicide resistant weed biotypes.

INTEGRATED PEST MANAGEMENT

FMC recommends the use of Integrated Pest Management (IPM) programs to control pests. This product may be used as part of an Integrated Pest Management (IPM) program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop or site systems in your area.

IMPORTANT PRECAUTIONS

1. Because most crops are highly sensitive to Authority 75DF, 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.
2. Soybean stunting may occur if excessive rainfall occurs after application but before soybeans emerge. Injury is more prevalent under poor drainage or compacted conditions or when soil is saturated for long periods of time. Soybeans rapidly outgrow stunting once favorable growing conditions return.
3. Do not apply Authority 75DF if there are visible signs of cracking due to soybean emergence, or serious crop injury may result.
4. Seedling disease, nematodes, 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.
5. Do not apply to land that has been or will be treated with ALLY, GLEAN, or FINESSE herbicide in Nebraska and Kansas without observing the rotational crop intervals for those products.
6. 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, or injury to desirable trees and plants may occur.
7. 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.
8. Thoroughly clean Authority 75DF from application equipment immediately after use and prior to spraying crops other than soybeans. Failure to remove even small amounts of Authority 75DF from application equipment may result in injury to subsequently sprayed crops.

9. Do not tank mix Authority 75DF with organophosphate insecticides. Do not apply Authority 75DF within 14 days before or after an application of an organophosphate insecticide, as severe crop injury may occur.

STORAGE AND DISPOSAL

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

Storage: Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a cool, dry place and avoid excess heat.

Product Disposal: If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional office for guidance.

Container Disposal: Do not reuse the outer box or the resealable plastic bag. When all soluble packets are used, the outer packaging can be considered clean and may be disposed of in a sanitary landfill or by incineration, or by other methods approved by local, state and national authorities. If the resealable bag contains the product in any way, the bag must be triple-rinsed with clean water. Add the rinsate to the spray tank and dispose of the outer wrap as described above.

NOTICE TO BUYER: Purchase of this material does not confer any rights under patents of countries outside of the United States.

Dealers Should Sell in Original Packages Only.

Terms of Sale or Use: On purchase of this product buyer and user agree to the following conditions:

Warranty: FMC makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Except as so warranted the product is sold as is. Buyer and user assume all risk of use and/or handling and/or storage of this material when such use and/or handling and/or storage is contrary to label instructions.

Directions and Recommendations: Follow directions carefully. Timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller and are assumed by the buyer at his own risk.

Use of Product: FMC's recommendations for the use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice.

Damages: Buyer's or user's exclusive remedy for damages for breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid and shall not include incidental or consequential damages.

Trademark information

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2. Trademark of Novartis.
3. Manufactured by Sandoz Chemicals Inc.
4. Trademark of American Cyanamid Corp.
5. Trademark of Dow Elanco
6. Trademark of FMC Corp.
7. Compounded for Thomas G. Kilfoil Co., Inc.
8. Trademark of Loveland Industries, Inc.
9. Manufactured for Cenex/Land 'O Lakes Agronomy Co.
10. Manufactured by Farmbelt Chemicals, Inc.
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