

# Intended For Use Only by Individuals/Firms Certified as Licensed Pesticide Applicators

EPA Reg. No. 279-3246 EPA Est. 279-IL-1

Active Ingredient:	By Wt.
Sulfentrazone*	62.1%
Cloransulam-methyl*	
Other Ingredients:	
•	100.0%

<sup>\*</sup>Authority First DF Herbicide contains 0.7 pounds of active ingredient per pound of product (0.62 pounds ai of sulfentrazone and 0.08 pounds of ai of cloransulammethyl)

# CAUTION

Sold By



FMC Corporation 2929 Walnut Street Philadelphia PA 19104

**Net Weight: 5 Pounds** 

#### **FIRST AID**

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

## **HOTLINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-331-3148 for emergency medical treatment information.

### **TABLE OF CONTENTS**

Section Title	Page Numb
Active Ingredient	1
First Aid	1
Hot Line Number	1
Precautionary Statements	2
Personal Protective Equipment (PPE)	2
User Safety Recommendations	2
Environmental Hazards	2
Physical/Chemical Hazards	2
Conditions of Sale and Limitation of Warranty	2
Resistance Management	2
Directions for Use	2
Agricultural Use Requirements	2
Storage and Disposal	3
Product Information	3
Application Information	3
Spray Drift Reduction Advisory	3
Mixing and Loading Instructions	4
Spray Equipment Clean-out	4
Rotational Crop Guidelines	5
Replanting Instructions	5
Soybeans (Conventional and GMO)	5
Weeds Controlled	6
Label Tracking Information	7

#### PRECAUTIONARY STATEMENTS

## Hazards to Humans (and Domestic Animals)

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing

Personal Protective Equipment (PPE)

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

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 exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **User Safety Recommendations** Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling the product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into 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 wash waters or rin-

Groundwater 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 groundwater 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 groundwater, 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.

# Conditions of Sale and Limitation of Warranty and Liability

**Notice:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded

The Directions for Use of this product should be followed carefully. 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 manner of use or application, weather or crop conditions beyond the control or FMC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and, Buyer and User agree to hold FMC and Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the directions under normal conditions of use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, FMC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION, PURCHASE, OR USE OF THIS PRODUCT. Any warranties, express or implied, having been made are inapplicable if this product has been used contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to (or conditions, or under conditions not reasonably foreseeable to (or beyond the control of) seller or FMC, and, to the extent permitted by applicable law, buyer assumes the risk of any such use.

To the extent permitted by applicable law, FMC or seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED

BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF FMC AND SELLER FOR ANY AND ALL CLAIMS. LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF FMC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

This Conditions of Sale and Limitation of Warranty and Liability may not be amended by any oral or written agreement.

#### RESISTANCE MANAGEMENT

Authority First DF Herbicide is a premixture of sulfentrazone (WSSA Group 14) and cloransulam-methyl (WSSA Group 2). Some weeds are known to develop resistance to herbicides that have been used repeatedly. While the development of resistance is well understood, it is not easily predicted. Therefore herbicides should be used in conjunction with resistance management strategies in the area. Consult the local or State agricultural advisors for details. If weed resistance should develop in the area, this product used alone may not continue to provide sufficient levels of weed control. If the reduced levels of control can not be attributed to improper application timing, unfavorable weather conditions or abnormally high weed pressure, a resistant strain may have developed.

To reduce the potential for weed resistance, use this product in a rotation program with other classes of chemistry and modes of action. Always apply this product at the recommended rates and in accordance with the use directions. Do not use less than recommended label rates alone or in tank mixtures. Do not use reduced rates of the tank mix partner. For optimum performance, scout fields carefully and begin applications when weeds are smaller rather than larger. If resistance is suspected, contact the local or State agricultural advisors.

#### DIRECTIONS FOR USE

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

Read all Directions for Use carefully before applying.

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, and shoes plus socks.

#### STORAGE AND DISPOSAL

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

#### **Pesticide Storage**

Store product in original container only, away from other pesticides, fertilizer, food or feed.

#### In Case of Spill

Avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call CHEMTREC (Transportation and spills): (800) 424-9300.

#### To Confine Spill

Dike surrounding area, sweep up spillage. Dispose of in accordance with information given under Pesticide Disposal.Wash spill area with water, absorb with sand, cat litter or commercial clay, sweep up and dispose of in an approved manner. Place damaged package in a holding container. Identify contents per required hazardous waste labeling regulations.

#### **Pesticide Disposal**

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. 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 Handling**

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: (For containers greater than 5 gallons) Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. (For containers 5 gallons or less) Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Triple rinse (or equivalent). Then offer for recycling if available, 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.

Returnable/Refillable Containers - Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibilthe container. Clean the container before final disposal, empty the remaining contents into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

PRODUCT INFORMATION
Authority First DF Herbicide is for preemergence control of broadleaf and grass weeds in soybeans only.

The mode of action of Authority First DF Herbicide involves uptake by weed roots and shoots. Preemergence and preplant incorporated applications of Authority First DF Herbicide require rainfall or irrigation to activate the herbicide. The amount of rainfall or irrigation required for activation following application depends on existing soil moisture, organic matter content and soil texture. If adequate moisture (1/2" to 1") is not received within 7 to 10 days after the Authority First DF treatment, a shallow cultivation may be needed to obtain desired weed control. When sufficient moisture is received after dry conditions, Authority First DF Herbicide will provide control of susceptible germinating weeds.

Authority First DF Herbicide exhibits excellent crop safety. 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 First DF Herbicide, like other soil-applied herbicides, can contribute to crop

Observe all instructions, crop restrictions, mixing directions, application precautions, replanting directions, rotational crop guidelines and other label information of each product when tank mixing with Authority First DF Herbicide.

#### **IMPORTANT PRECAUTIONS**

- Back to back application of ALS or ALS containing herbicides can occasionally result in residual herbicide stacking and potential crop injury. Applicator and grower are responsible and should be aware of previous herbicide use and potential interaction it may have with Authority First DF Herbicide application.
- 2. Ensure the seed furrow is closed and the seed covered on acres treated with Authority First DF Herbicide.
- 3. 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 outgrow stunting once favorable growing conditions return.
- 4. Do not apply Authority First DF Herbicide if there are visible signs of cracking dué to soybéan emergence, or serious crop injury such as but not limited to stand loss may result.
- 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.
- 6. When tank mixing, follow the most restrictive use rates and precautions of the mixing partners.

#### APPLICATION INFORMATION

#### DO NOT APPLY TO CROPS OTHER THAN SOYBEANS.

#### APPLY WITH GROUND SPRAYERS ONLY

Use a standard low pressure herbicide boom sprayer equipped with suitable nozzles and screens. Apply uniformly using properly calibrated nozzles (10 to 40 psi) and screens and strainers no finer than 50 mesh. Use 10 to 40 gallons of spray solution per acre. Do not exceed 40 psi spray pressure unless required by the spray nozzle manufacturer.

Continuous agitation during application is required. Avoid swath overlaps. Shut off spray booms while turning, slowing or stopping, as over application may result. Do not allow Authority First DF spray mixtures to sit overnight as settling of product and difficulty of re-suspending may

To avoid injury to sensitive crops, spray equipment used for Authority First DF Herbicide applications must be drained and thoroughly cleaned with water plus ammonia before being used to apply other products. See Spray Clean-out Section on page 4.

Avoid all direct, and/or indirect spray contact with non-target plants. Do not apply near desirable vegetation. Allow adequate distance between target area and desirable plants to minimize exposure.

#### **RUNOFF AND WIND EROSION PRECAUTIONS**

Do not apply under conditions which favor runoff or wind erosion of soil containing Authority First DF to non-target areas.

To prevent off-site movement due to runoff or wind erosion:

- Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, allow the soil surface to be settled by rainfall or irrigation.
- Do not apply to impervious substrates such as paved or highly compacted surfaces or frozen or snow covered ground.
- Do not apply to soils when saturated with water.
- Do not use tail water from the first flood or furrow irrigation of treated fields to treat non target crops unless at least 1/2 inch of rainfall has occurred between application and the first irrigation.

#### SPRAY DRIFT REDUCTION ADVISORY

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from applications to agricultural field crops.

Where States and local governments have more stringent regulations, they must be observed.

#### **Droplet Size Information**

Reduce drift potential by applying large droplets. The optimum drift management strategy is to apply the largest droplets that will provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift when applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity and Temperature Inversions).

VMD - VMD is the expression of the droplet size of the spray cloud. The VMD value means that 50% of the droplets are larger than the expressed value and 50% of the droplets are smaller than the expressed value. Optimum spray clouds should be 450 microns with fewer than 10% of the droplets being 200 microns or smaller.

Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows usually produce larger droplets.

Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of Nozzles – Use the minimum number of nozzles that provide uniform coverage

Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types narrower spray angles product larger droplets. Consider using low drift nozzles.

Application Height - Making applications at the lowest height practical reduces exposure of spray droplets to evaporation and wind movement.

Swath Adjustment - Swath adjustment distance must increase with increasing drift potential (higher wind, smaller droplets, etc.)

Wind - Drift potentials are lowest between wind speeds of 3 to 10 miles per hour. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Applications in wind conditions outside of this range could increase the risk of off-target effects and should be avoided. Note that 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 conditions of low relative humidity set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

**Temperature Inversions –** Do not apply Authority First during temperature inversions because the drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures 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 following 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 a smoke generator. Smoke that layers and moves laterally in a concentrated clod (under low wind conditions) indicate an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas - Applications should be made when the wind is blowing away from adjacent sensitive areas (e.g. residential areas, bodies of water, known habitats for threatened or endangered species and nontarget crops).

# MIXING INSTRUCTIONS AND LOADING INSTRUCTIONS

**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 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or 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 a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

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

#### **Authority First DF Herbicide Applied Alone**

Select the proper Authority First DF Herbicide application rate from the following TIMING AND METHOD OF APPLICATION section of this label. Fill the spray tank with approximately one-half of the volume of water needed for the acreage being treated. With agitator operating, add the required amount of Authority First DF Herbicide for acreage being treated by opening the bottle(s) and measuring directly into the spray tank. Allow the product to fully disperse. Complete the addition of spray water. Maintain agitation during filling, mixing and application. Apply the Authority First DF Herbicide spray mixture immediately after mixing. Do not store mixture.

#### Authority First DF Applied in Tank Mix Combination

Select the proper Authority First DF Herbicide application rate from TIM-ING AND METHOD OF APPLICATION section of label. Read and follow

all applicable use directions, precautions and restrictions on the respective tank mix product labels. To ensure product compatibility, a jar test should be conducted before large volume mixing. Provided the jar test indicates the mixture is compatible, prepare the tank mixture as follows.

Fill the spray tank with approximately one-half of the volume of water needed for the acreage being treated. With agitator operating, add the required amount of Authority First DF Herbicide for the acreage being treated by opening the bottle(s) and measuring directly into the spray tank. Allow the product to fully disperse. Next add the recommended amount(s) of the additional tank mix product(s) in the following order: first dry formulations (e.g., wettable powders, dry flowables), next liquid suspensions (e.g., flowables) and finally liquids (e.g., EC's). Allow time for complete mixing and dispersion after each addition, adding water as necessary. Complete the addition of spray water. Maintain agitation during filling, mixing and application. Use Authority First DF Herbicide tank mixtures immediately after mixing. Do not store tank mixtures.

#### **Fertilizer Spray Mixtures**

Applications of Authority First DF Herbicide alone, or with recommended tank mixtures, in conjunction with fertilizer solutions may be used unless use directions specifically state otherwise. Small quantities should be tested for compatibility by the following procedure before mixing in full spray tank quantities.

- 1) Put 1 pint of fertilizer solution in a quart jar.
- Add the appropriate amount of herbicide based on the table below. If more than one product is to be used, add each separately using the following sequence: dry formulations (e.g., wettable powders, dry flowables) first, liquid suspensions (e.g., flowables) next and finally liquids (e.g., EC's).

Herbicide Type	Herbicide Field Use Rate	Amount Herbicide Added Per Pint
Wettable Powder or Dry Flowable	0.5 pound	0.75 teaspoon
	1.0 pound	1.50 teaspoons
	2.0 pounds	3.00 teaspoons
	3.0 pounds	4.50 teaspoons
Emulsified Concentrates	1.0 pint	0.5 teaspoon
Liquid Flowables	1.0 quart	1.0 teaspoon
	2.0 quarts	2.0 teaspoons
	3.0 quarts	3.0 teaspoons

\*Based on a spray volume of 25 gal. per acre. For lower or higher spray volumes, adjust fluid fertilizer quantity accordingly.

- Close jar and shake well.
- Watch mixture for several seconds, again after 5 minutes and again after 30 minutes. If herbicide/fertilizer combination remains mixed or can be remixed readily (i.e., does not permanently separate, foam, gel or become lumpy), the mixture is compatible and can be mixed in full volumes and sprayed. If the mixture is compatible, prepare spray by adding fertilizer solution to the tank first, then follow directions noted below:

Authority First DF Herbicide Applied Alone with Liquid Fertilizer In order to add Authority First DF Herbicide to a liquid fertilizer carrier, Authority First must be premixed in a slurry of product and clear water. Fill the spray tank one-half full with fertilizer solution. With agitator operating, add the Authority First DF Herbicide slurry to the spray tank.

Use a minimum of one gallon of water for each container of Authority First DF Herbicide. Stir until completely dissolved. Then add slurry to the spray tank through a 20-35 mesh screen. Rinse container used for pre-mixing and add rinsate to the spray tank. Complete filling the sprayer tank with fertilizer. Maintain agitation during filling, mixing and application. Use Authority First DF Herbicide spray mixture immediately after mixing. Do not store mixture.

#### Authority First DF Herbicide Applied in Tank Mix Combinations with Fertilizer

Fill the spray tank one-half full with fertilizer solution. With the agitator operating, add a slurry of Authority First DF Herbicide as described in the preceding paragraph. Next dilute the individual tank mix partners with sufficient water to form a free flowing dispersion, then add to the spray tank of fertilizer. While maintaining agitation, add the other products using the following order: slurry of dry formulations (wettable powders, dry flowables) first, diluted liquid formulations (EC's, flowables) second. Complete filling the sprayer tank with fertilizer. Maintain agitation during filling, mixing and application. Use Authority First DF Herbicide tank mixtures immediately after mixing. Do not store tank mix-

SPRAYER EQUIPMENT CLEAN-OUT
After spraying Authority First DF Herbicide and before using sprayer equipment for any other applications, the sprayer must be thoroughly cleaned using the following procedure:

- 1. Drain sprayer tank, hoses, and spray boom and thoroughly rinse the inside of the sprayer tank with clean water to remove sediment and residues. Thoroughly flush sprayer hoses, boom and nozzles with clean water.
- Fill the tank 1/2 full with clean water, and add appropriate detergent or ammonia (follow manufacturer's directions for use). Fill the tank

- to capacity and operate the sprayer for 15 minutes to flush hoses, boom, and nozzles.
- Convenient and through cleaning of the sprayer can be achieved if the cleaning solution is left in the spray tank, hoses, spray booms and spray nozzles overnight or during storage.
- Before using the sprayer, drain the sprayer system. Rinse the tank with clean water and flush through the hoses, boom, and nozzles. Remove and clean spray tips and screens separately with the detergent or ammonia solution.
- Properly dispose of all cleaning solution and rinsate in accordance with Federal, State and local regulations and guidelines.

Do not drain or flush equipment on or near desirable trees or plants. Do not contaminate any body of water including irrigation water that may be used on other crops.

Should small quantities of Authority First DF Herbicide remain in inadequately cleaned mixing, loading and/or spray equipment, they may be released during subsequent applications potentially causing effects to certain crops and other vegetation. FMC accepts no liability for any effects due to inadequately cleaned equipment.

### ROTATIONAL CROP GUIDELINES

Shown below are the minimum intervals in months from the time of Authority First DF Herbicide application until Authority First DF treated soil may be replanted with the crops listed. Cover crops for soil health and erosion control can be planted at any time after an application of Authority First DF Herbicide, but do not use for food or feed. Residual activity of Authority First DF Herbicide may result in injury to some cover crop species if planted to soon following application. Consult your local University extension service for cover crop sensitivity to Authority First DF Herbicide. When Authority First DF Herbicide is tank mixed with other herbicide(s), refer to all the labels for re-cropping instructions, following the intervals that are the most restrictive. For crops not listed the interval is 30 months and a successful field bioassay.

Crop	Interval (months)
Alfalfa	12
Barley	12
Canola	24
Corn, Field*	18 or 10
Corn, Pop*	18 or 10
Corn, Seed*	18 or 10
Corn, Sweet*	18 or 10
Cotton	18 or 12†
Dry shelled beans and peas	9
Lima beans	12
Oats	12
Peanuts	12
Potatoes	18
Rice	10
Rye	12
Snap beans	12
Sorghum	12
Soybeans	Anytime
Succulent peas	9
Sugar beets**	30
Sunflower**	30
Tobacco***	30
Wheat	4

\* Corn (including field corn, popcorn and seed corn)

Observe an 18 month rotational interval if 6.45 - 8.0 oz. of Authority First DF Herbicide is applied to soils of 1.5% organic matter or less, and pH is above 7.

#### **Hybrid Seed Production**

Corn inbred lines grown for hybrid seed production may be injured the growing season following an application of Authority First DF Herbicide. Inbred lines should be thoroughly tested for crop tolerance before rotating to production scale acreages. FMC will not accept responsibility for any crop injury on field corn grown for seed following an application of Authority First DF Herbicide.

- \*\*These crops require a 30-month rotational interval and a successful field bioas-
- \*\*\* Transplanted tobacco may be planted 10 months after application of a maximum application rate of 3.0 ounces per acre of Authority First DF. Tobacco in seedbed nurseries may be replanted 18 months after applications of 3.0 ounces per acre of Authority First DF and following a successful field bioassay. A rotational interval of 30 months and a successful field bioassay is required for all applications of Authority First greater than 3.0 curpose per acre. tions of Authority First greater than 3.0 ounces per acre.
- † Cotton may be planted after 12 months where Authority First DF Herbicide was applied at rates 5 oz/acre or less and meets the following conditions:
  - Medium and fine soils
  - Ph <7.2
  - Rainfall or irrigation must exceed 15" after application of Authority First DF Herbicide

#### REPLANTING INSTRUCTIONS

If the initial planting of soybeans fails to produce a uniform stand, soybeans may be replanted in fields treated with Authority First DF Herbicide alone. Do not retreat fields with a second application of Authority First DF Herbicide. When tank mixing with a labeled product, refer to the replant instructions for that product. Do not replant treated fields with any crop at intervals that are inconsistent with the ROTA-TIONAL CROP GUIDELINES on the Authority First DF Herbicide label. Where a tank mix is used, refer to the product's labels for any additional replant instructions.

### **SOYBEANS (Conventional and GMO)** TIMING AND METHOD OF APPLICATION

Authority First may used alone or in tank mixture combinations for the control of the weeds listed in conventional or GMO soybean varieties.

#### Standard Rate Table 1:

Soil Organic	Authority First DF	Product Use Rates (Pound Active Ingredient Per Acre)	
Matter*	(Dry Ounces per Acre)**	Sulfentrazone	Cloransulam- methyl
3% or less	6.45	0.25	0.032
Greater than 3%	8.00	0.31	0.040

\*Do not apply Authority First DF Herbicide to soils classified as sand with less than 1% organic matter.

Preplant Incorporated Application
Apply Authority First DF Herbicide alone or in tank mix combination with other herbicides registered for preplant incorporated application to soybeans. Incorporate the herbicide(s) into the top 1 to 3 inches of the final seedbed using equipment that provides thorough soil mixing. When Authority First DF Herbicide is applied in tank mix combination with other herbicide(s), follow the incorporation directions for the tank mix partner(s). Follow applicable use instructions, including application rates, precautions and restrictions of each product used in the tank mix-

#### **Preplant Surface Application**

Apply Authority First DF Herbicide alone or in tank mix combination with apply Authority First Dr Herbicide alone of in tank mix combination with other herbicides registered for preplant soil surface application to soybeans. If applied in tank mix combination, follow use instructions, including application rates (note: apply 1/2 of the maximum application rate for suppression of weeds in Roundup Ready soybeans, maintaining control with sequential application(s) of registered postemergence herbicidal descriptions. bicides), precautions and restrictions of each product used in the tank mixture.

**Preemergence Application**Apply at planting time or within 3 days after planting. Authority First DF Herbicide may be applied alone or in tank mix combination with other herbicides registered for preemergence application to soybeans. When applied in tank mix combination, follow applicable use instructions, including application rates (note: apply 1/2 of the maximum application rate for suppression of weeds in Roundup Ready soybeans, maintaining control with sequential application(s) of registered postemergence herbicides). Observe the precautions and restrictions of each product used in the tank mixture. Apply before planting, at planting time or prior to seed germination. Properly closed seed furrows are necessary when applying at planting time of before seed germination. Do not apply later than 3 days after planting (or after seed germination), as crop injury may result.

<sup>\*</sup>Maximum application rates: See Preplant Surface and Preemergence Application below for specific recommendations.

#### Weeds Controlled

When used as directed above, Authority First DF Herbicide will provide control or suppression of the following broadleaf weeds and grasses.

Common Name	Scientific Name
Broadleaves	
Amaranth, Palmer	Amaranthus, Palmer
Amaranth, spiny	Amaranthus, spinosus
Anoda, spurred	Anoda cristata
Beggarweed, Florida	Desmondiom tortuosum
Carpetweed	Mollugo verticillata
Cocklebur, common	Xanthium Pensylvanicum
Copperleaf, Hophornbeam	Acalypha ostryeafolia
Croton, tropic	Croton glandulosus
Daisy, American	Eclipta alba
Dayflower, common	Commelina communis
Galinsoga, hairy	Galinsoga ciliata
Groundcherry, clammy	Physalis heterophylla
Groundcherry, cutleaf	Physalis angulata
Horseweed (Marestail)* *	Hippuris vulgaris
Jimsonweed	Datura stramonium
Kochia	Kochia scoparia
Ladysthumb	Polygonum persicaria
Lambsquarters, common	Chenopodium album
Mallow, Venice	Hibiscus trionum
Mexicanweed	Caperonia castanaefolia
Morningglory, entireleaf	Ipomea hederacea integriusc
Morningglory, entirelear	Ipomea hederacea hederacea
Morningglory, ryylear  Morningglory, palmleaf	Ipomea Wrightii
Morningglory, pairnear  Morningglory, pitted *	Ipomea, lacunosa
Morningglory, purple	Ipomea turbinata
Morningglory, purple  Morningglory, red	Ipomea coccinea
Morningglory, red Morningglory, smallflower	Jacquemontia tamnifolia
Morningglory, strainiower  Morningglory, tall	Ipomea, purpurea
Mustard, wild	Brassica kaber
Nightshade, Eastern black	Solanum americanum
Nightshade, hairy	Solanum sarrachoides
Nightshade, silverleaf	Solanum elaeagnifolicum
Pigweed, redroot	Amaranthus retroflexus
Pigweed, smooth	Amaranthus retronexus  Amaranthus hybridus
Pigweed, tumble	Amaranthus albus
Poorjoe	Diodia teres
Purslane, common	Portulaca oleracea
Pusley, Florida	Richardia scabra
	Ambrosia artemisiifolia
Ragweed, common **	Ambrosia trifida
Ragweed, giant ** Senna, coffee	Cassia occidentalis
Teaweed PA	Sida, prickly Polygonum pensylvanicum
Smartweed, PA	Cucumis melo
Smellmelon	
Spurge, spotted	Euphorbia maculata
Starbur, bristly	Acanthospermum hispidum
Sunflower, common	Helianthus annuus
Thistle, Russian	Salsola kali
Velvetleaf	Abutilon theophrasti
Waterhemp, common	Amaranthus rudis
Waterhemp, tall	Amaranthus tuberculatos

Grasses	
Barnyardgrass*	Echinochloa crus-galli
Broadleaf signalgrass	Brachiaria platyphylla
Crabgrass, large	Digitaria sanguinalis
Crabgrass, smooth	Digitaria ischaemum
Crabgrass, southern*	Digitaria ciliaris
Crowfootgrass*	Dactyloctenium aegyptium
Foxtail, giant*	Setaria faberi
Foxtail, Green	Setaria viridis
Foxtail, yellow*	Setaria lutescens
Goosegrass	Eleusine indica
Johnsongrass, seedling *	Sorghum halapense
Orchardgrass	Dactylis glomerata
Panicum fall	Panicum dichotomiflorum
Panicum, Texas	Panicum texanum

Sedges	
Nutsedge, purple	Cyperus rotundus
Nutsedge, yellow	Cyperus esculentus
Sedge, annual	Cares spp.

#### Limited Residual Rates for Planned Sequential Application Program in Soybeans

Use rates in Table 2 are to be used in conjunction with an effective planned POST herbicide program; Authority First DF Herbicide at these reduced rates will provide early season control or suppression to reduce early season weed competition. If resistance with the POST herbicide is documented in your area, use rates in Table 1.

Apply before planting, at planting time or prior to seed germination. Properly closed seed furrows are necessary when applying at planting time of before seed germination. Recommended postemergence treatments may include any product of combination of products labeled for

#### Limited Residual RateTable for Planned Sequential Application Program in Soybeans

#### Table 2:

Soil Organic	Authority First DF		
Matter*	(Dry Ounces per Acre)	Sulfentrazone	Cloransulam- methyl
3% or less	3.00 - 5.00	0.116 - 0.193	0.015 - 0.025
Greater than 3%	4.00 - 6.00	0.155 - 0.233	0.020 - 0.030

<sup>\*</sup>Do not apply Authority First DF Herbicide to soils classified as sand with less

#### **Preplant Burndown Application**

Authority First DF Herbicide, used at 6.45 - 8.0 oz./acre as in Full Rate Table 1 above, aids in the burndown of weeds listed below, when applied as follows. Authority First DF Herbicide can provide for increased burndown activity on emerged weeds in no-till applications, but is not intended to replace part or all of an appropriate preplant burndown program. For control of the weeds in the Weeds Controlled table in no-till / minimum till fields, Authority First DF Herbicide must be tankmixed or used in combination with a full burndown program. This may include 2,4-D alone or in combination with Aim, dicamba, glyphosate, glufosinate, paraquat, or other appropriate burndown herbicides in tankmixes at their appropriate rate for the size and species of weeds present. Reduced rates of Authority First DF Herbicide and/or the corresponding burndown partner herbicides can result in weed escapes and unsatisfactory performance.

Apply a minimum of ten gallons per acre finished spray volume. Thorough coverage is essential. Use a non-ionic surfactant (NIS) having at least 80% active ingredient strength at 0.125-0.25% v/v (1-2 pints per 100 gallons of spray solution) plus ammonium sulfate (AMS) at 2.5% v/v. Crop oil concentrate (COC) and Methylated Seed Oil (MSO) at 1.2% v/v plus ammonium sulfate may be used. Burndown results may be slowed or reduced when the growth of the weeds is affected by unusual environmental factors just prior to or after application such as especially cool or widely fluctuating day and night air temperatures, drought, heat stress, or waterlogged soils.

#### **Weeds Controlled**

When used as directed for burndown, Authority First DF Herbicide will aid in the control or suppression of the following broadleaf weeds up to

Scientific Name	Scientific Name

Broadleaves	
Cocklebur, common	Xanthium Pensylvanicum
Horseweed (Marestail) * *	Hippuris vulgaris
Jimsonweed	Datura stramonium
Mallow, Venice	Hibiscus trionum
Morningglory, entireleaf	Ipomea hederacea tinegrisc
Morningglory, ivyleaf	Ipomea hederacea hederacea
Morningglory, palmleaf	Ipomea Wrightii
Morningglory, pitted *	Ipomea lacunosa
Morningglory, purple	Ipomea turbinata
Morningglory, red	Ipomea coccinea
Morningglory, smallflower	Jacquemontia tamnifolia
Morningglory, tall	Ipomea purpurea
Ragweed, common * *	Ambrosia artemisiifolia
Ragweed, giant * *	Ambrosia trifida
Sicklepod	Cassia obtusifolia
Smartweed, PA	Polygonum pensylvanicum
Sunflower, common	Helianthus annuus
Velvetleaf *	Abutilon theophrasti

<sup>\*</sup>For Velvetleaf control, use 28% nitrogen (UAN) or AMS with NIS or COC.

#### **Precautions**

Properly closed seed furrows are necessary when applying at planting time of before seed germination.

Maintain spray tank agitation until the spray mixture is applied.

#### Restrictions

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

<sup>\*</sup> Provides suppression or partial control only \* \* Will not control ALS resistant biotypes of these weed species

<sup>\* \*</sup> Authority First DF will not control ALS resistant biotypes of these weed species

Do not make more than one soil application per crop year.

Do not apply more than 8.0 ounces of Authority First DF per acre per season (as a cumulative total of Authority First DF Herbicide soil application and FirstRate post-emergence application (1 oz/acre Authority First DF Herbicide contains 0.005 lb a.i. cloransulam-methyl; and 0.3 oz/acre FirstRate contains 0.016 lb a.i. cloransulam-methyl. Do not apply more than 0.055 lb. active ingredient (a.i.) per acre of cloransulam-methyl in a single growing season).

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

Do not harvest soybeans for 65 days after application of Authority First DF Herbicide.

Do not apply Authority First DF Herbicide to soils classified as sand containing less than 1% organic matter.

Do not drain or flush equipment on or near desirable trees or plants. Do not contaminate any body of water including irrigation water that may be used on other crops

Aim, Authority and FMC — Trademarks of FMC Corporation FirstRate - Trademark of Dow AgroSciences LLC Roundup and Roundup Ready — Trademarks of Monsanto Technology II C

#### LABEL TRACKING INFORMATON

Label Code: Authority First DF 08-01-16

FMC Corporation Agricultural Products Group 1735 Market Street Philadelphia PA 19103 215-299-6000

©2015 FMC Corporation All Rights Reserved