

279-3231

10-12-2000

1/4



GAUNTLET™

EPA Reg. No. 279-3231

For Agricultural or Commercial Use Only

Sulfentrazone 75DF Herbicide

EPA Reg. No. 279-3148

EPA Est. 279-XXXX

Active Ingredient:	By Wt.
Sulfentrazone*	75.0%
Inert Ingredients:	25.0%
	<u>100.0%</u>

* N-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]phenyl]methanesulfonamide
 Contains 0.75 pounds of active ingredient per pound formulated.
 U.S. Patent No. 4,818,275

FirstRate*

EPA Reg. No. 62719-275

EPA Est. 279-XXXX

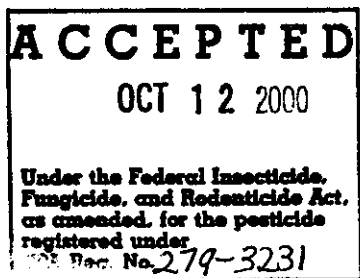
Active Ingredients:	By Wt.
Cloransulam-methyl*	84.0%
Inert Ingredients:	16.0%
	<u>100.0%</u>

* N-(2-carbomethoxy-6-chlorophenyl)-5-ethoxy-7-fluoro(1,2,4)triazolo-[1,5-c]pyrimidine-2-sulfonamide
 Contains 0.84 pounds of active ingredient per pound of product.
 US Patent Number: 5,163,995

This Co-Pack contains 26.5 ounces of Sulfentrazone 75DF Herbicide and 5 water soluble packets each containing 0.6 ounces of FirstRate*.

For Emergency Assistance Call (800) 331-3148

Refer to the Individual product labels for Precautionary Statements, Worker Protection Standard Requirements, Storage and Disposal and Environmental Hazards information.



CAUTION

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.

FOR USE ON SOYBEANS ONLY

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

Do not make more than one soil application during a single season.

Do not apply more than 6.67 ounces of Sulfentrazone 75DF and more than 0.75 ounces of FirstRate* per acre per season.

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

Do not harvest soybeans for 65 days after application of Gauntlet Herbicide.

Do not apply Gauntlet Herbicide to soils classified as sands containing less than 1% organic matter.

GENERAL INFORMATION

Gauntlet Herbicide is a co-pack product for preemergence control of broadleaf and grass weeds in soybeans. Each co-pack of Gauntlet contains 26.5 ounces of Sulfentrazone 75DF herbicide and 3.0 ounces of FirstRate* and will treat 4 to 5 acres depending on organic matter content of the soil. **The individual components must be used together or a reduction in weed control will result. Do not mix or apply separately.**

The mode of action of Gauntlet involves uptake by weed roots and shoots. Preemergence and preplant incorporated applications of Gauntlet 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 Gauntlet treatment, a shallow cultivation may be needed to obtain desired weed control. When sufficient moisture is received after dry conditions, Gauntlet will provide control of susceptible germinating weeds.

Gauntlet 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 Gauntlet, like other soil-applied herbicides, can contribute to crop response. However, these early symptoms are short-lived. Early crop response has not resulted in yield reductions in research trials.

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 Gauntlet.



FMC Corporation
Agricultural Products Group
Philadelphia PA 19103

9/2000

Net Contents:

Burndown Application: Gauntlet provides burndown of certain weeds listed below. Thorough coverage is essential and use a minimum of ten gallons per acre finished spray volume. 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) 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. To broaden the spectrum of weeds controlled, Gauntlet may be tank mixed with other herbicides such as 2,4-D, Roundup, or Gramoxone.

Weeds Controlled: When used at rates appropriate for the soil organic matter content listed in the Application Rate table, Gauntlet Herbicide will provide control or suppression of the following broadleaf weeds.

BROADLEAVES

Cocklebur, common	Ragweed, common
Horseweed (Marestail)	Ragweed, giant
Jimsonweed	Sicklepod
Mallow, Venice	Smartweed, Pennsylvania
Morningglory:	Sunflower, common
Entireleaf	Velvetleaf*
Ivyleaf	
Palmleaf	
Pitted*	
Purple	
Red	
Smallflower	
Tall	

*For Velvetleaf control, use 28% nitrogen (UAN) or AMS with NIS or COC.

REPLANTING INSTRUCTIONS

If the initial planting of soybeans fails to produce a uniform stand, soybeans may be replanted in fields treated with Gauntlet alone. Do not retreat fields with a second application of Gauntlet. 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 ROTATIONAL CROP GUIDELINES on the Gauntlet label. Where a tank mix is used, refer to the product's labels for any additional replant instructions.

ROTATIONAL CROP GUIDELINES

Shown below are the minimum intervals in months from the time of Gauntlet Herbicide application until Gauntlet treated soil can be replanted to the crops listed. When Gauntlet is tank mixed with another herbicide, refer to the partner label for recropping instructions, following the directions that are most restrictive.

ANYTIME
Soybeans

4 MONTHS
Wheat

9 MONTHS
Popcorn

10 MONTHS
Field corn
Seed corn¹
Rice
Sorghum

12 MONTHS
Other Cereal Grains
Alfalfa
Dry beans
Peanuts

18 MONTHS²
Cotton
Sweet corn

24 MONTHS²
Canola

30 MONTHS²
Sugar beets
Sunflowers
Tobacco

1. Hybrid Seed Production: Corn inbred lines grown for hybrid seed production may be injured the growing season following an application of Gauntlet. Inbred lines should be thoroughly tested for crop tolerance before rotating to large acreage. While growers are not prohibited from rotating to seed corn in the growing season following an application of Gauntlet, FMC will not accept responsibility for any crop injury on field corn grown for seed following an application of Gauntlet.

2. Crops that have rotational intervals greater than 12 months after Gauntlet application are the result of crop injury concerns.

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.

Gauntlet and ~~FMC~~ — Trademarks of FMC Corporation

*Trademark of Dow AgroSciences LLC
Dow AgroSciences LLC | Indianapolis, IN 46268 U.S.A.

Fertilizer Spray Mixtures: Applications of Gauntlet 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 tankful quantities.

- 1) Put 1 pint of fertilizer solution in a quart jar.
- 2) 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	Rate/Acre	Amount To Be Added Per Pint of Fluid Fertilizer*
Wettable Powders	1/2 pound	3/4 level teaspoon
or	1 pound	1 1/2 level teaspoons
Dry Flowables (Dry Granules)	2 pounds	3 level teaspoons
	3 pounds	4 1/2 level teaspoons
Emulsifiable Concentrates	1 pint	1/2 level teaspoon
or	1 quart	1 level teaspoon
Flowables	2 quarts	2 level teaspoons
	3 quarts	3 level teaspoons

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

- 3) Close jar and shake well.
- 4) Watch mixture for several seconds, again in 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 incompatible, prepare spray by adding fertilizer solution to the tank first, then follow directions noted below.

Gauntlet Applied Alone: Fill the spray tank one-half full with fertilizer solution. With agitator operating, add Gauntlet herbicide in a slurry as described next. The film used in the water soluble packaging of Gauntlet is not soluble in liquid fertilizer solutions. In order to add Gauntlet to liquid fertilizer carrier, the product must be premixed with water to form a slurry. Use a minimum of one gallon of water for each canister of Gauntlet. Stir (or shake if pre-mixed in a closed container) until the water soluble packets are completely dissolved and granules are dispersed and then add 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 Gauntlet spray mixture immediately after mixing. Do not store mixture.

Gauntlet Applied in Tank Mix Combinations: Fill the spray tank one-fourth to one-third full with fertilizer solution. With the agitator operating, add a slurry of Gauntlet herbicide as described in the paragraph just above. 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, using the following order: slurry of dry formulations (wetable 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 Gauntlet tank mixtures immediately after mixing. Do not store tank mixtures.

SPRAYER EQUIPMENT CLEAN-OUT:

After spraying Gauntlet 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. In addition, thoroughly flush sprayer hoses, boom and nozzles with clean water.
2. 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.
3. 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.
4. 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.

TIMING AND METHOD OF APPLICATION

Preplant Incorporated Application: Apply Gauntlet 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. Do not apply Gauntlet earlier than 30 days prior to planting. When Gauntlet 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 mixture.

Preplant Surface Application: Apply Gauntlet alone or in tank mix combination with other herbicides registered for preplant soil surface application to soybeans. Do not apply Gauntlet earlier than 30 days prior to planting. If applied in tank mix combination, follow use instructions, including application rates, precautions and restrictions of each product used in the tank mixture.

Preemergence Application: Apply after planting but prior to crop or weed emergence. Gauntlet 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, precautions and restrictions of each product used in the tank mixture. Do not apply Gauntlet if soybeans are emerging through the soil surface (cracking) or crop injury may result.

Application Rate:

Soil Organic Matter*	ACRES TREATED BY CONTENTS OF CANISTER	Rates of Product OZ./A (LB./A./A)	
		Sulfentrazone 75DF	FirstRate*
3% or less	5	5.33 (0.25)	0.6 (0.031)
Greater than 3%	4	6.67 (0.31)	0.75 (0.039)

*Do not apply Gauntlet Herbicide to soils classified as sand with less than 1% organic matter.

Weeds Controlled: When used at rates appropriate for the soil organic matter content listed in the table above, Gauntlet Herbicide will provide control or suppression of the following broadleaf weeds and grasses.

BROADLEAVES

- Amaranth, Palmer
- Amaranth, spiny
- Anoda, spurred
- Beggarweed, Florida
- Carpetweed
- Cocklebur, common
- Copperleaf, Hophornbeam
- Croton, tropic
- Daisy, American
- Dayflower, common
- Galinsoga, hairy
- Groundcherry, clammy
- Groundcherry, cutleaf
- Horseweed (Marestail)
- Jimsonweed
- Kochia
- Ladysthumb
- Lambsquarters, common
- Mallow, Venice
- Mexicanweed
- Morningglory:
 - Entireleaf
 - Ivyleaf
 - Palmleaf
 - Pitted*
 - Purple
 - Red
 - Smallflower
 - Tall

- Mustard, wild
- Nightshade, eastern black
- Nightshade, hairy
- Nightshade, silverleaf
- Pigweed:
 - Redroot
 - Smooth
 - Tumble
- Poorjoe
- Purslane, common
- Pusley, Florida
- Ragweed, common
- Ragweed, giant
- Senna, coffee
- Sida, prickly (Teaweed)
- Smartweed, Pennsylvania
- Smellmelon
- Spurge, spotted
- Starbur, bristly
- Sunflower, common
- Thistle, Russian
- Velvetleaf
- Waterhemp, common
- Waterhemp, tall

GRASSES

- Barnyardgrass*
- Broadleaf signalgrass
- Crabgrass, large
- Crabgrass, smooth
- Crabgrass, southern*
- Crowfootgrass*
- Foxtail, giant*
- Foxtail, Green
- Foxtail, yellow*

- Goosegrass
- Johnsongrass, seedling*
- Orchardgrass
- Panicum, fall
- Panicum, Texas

SEDGES

- Nutsedge, purple
- Nutsedge, yellow
- Sedge, annual

*Indicates suppression or partial control only

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 washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

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.

GENERAL APPLICATION INFORMATION

DO NOT use on crops other than soybeans.

Ground application 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.

Continuous agitation during application is required. Avoid overlap. Shut off spray booms while turning, slowing or stopping, as over application may result. Avoid letting Gauntlet sit overnight as settling of product and difficulty of resuspending may occur.

To avoid injury to sensitive crops, spray equipment used for Gauntlet applications must be drained and thoroughly cleaned with water plus ammonia before being used to apply other products.

Avoid all direct or indirect contact with non-target plants. Do not apply near desirable vegetation and 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 Gauntlet 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, the soil surface should first 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 tailwater 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 PRECAUTIONS

Do not apply when weather conditions favor drift to non target sites. To minimize spray drift to non target areas:

- Use low pressure application equipment capable of producing a large droplet spray.
- Do not use nozzles that produce a fine-droplet spray.
- Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.
- Keep ground-driven spray boom as low as possible above the target surface.
- Spray when conditions are calm or wind speed is low. Do not spray when wind is gusting or steady wind speed is greater than 10 mph.

Do not exceed a spray pressure of 40 psi.

MIXING INSTRUCTIONS

Gauntlet Herbicide is a co-pack product for preemergence control of broadleaf and grass weeds in soybeans. Each co-pack of Gauntlet contains 26.5 ounces of Sulfentrazone 75DF herbicide and 3.0 ounces of FirstRate™ herbicide and will treat 4 to 5 acres depending on organic matter content of the soil. The individual components must be used together or a reduction in weed control will result. Do not mix or apply separately. Empty the entire contents of the canister into the spray tank together.

Gauntlet Applied Alone: Fill the spray tank one-half full with water. With agitator operating, add the required amount of Gauntlet herbicide for acreage being treated by opening the canister(s) and emptying the contents directly into the spray tank. Do not open the water soluble packets. Allow time to fully disperse. (Water soluble packets will initially float on the surface and should dissolve completely within 5 minutes.) Handling packets with hands should be minimized. Do not handle if hands or gloves are wet. Complete filling the spray tank with water. Maintain agitation during filling, mixing and application. Use Gauntlet spray mixture immediately after mixing. Do not store mixture.

Gauntlet Applied in Tank Mix Combination: Read and follow all applicable use directions, precautions and restrictions on the respective tank mix partner labels. To ensure product compatibility, a jar test should be conducted before full-scale mixing. Provided the jar test indicates the mixture to be compatible, prepare the tank mixture as follows. Fill the spray tank one-fourth to one-third full with water. With agitator operating, add the required amount of Gauntlet herbicide for acreage being treated by opening the canister(s) and emptying the contents directly into the spray tank. Do not open the water soluble packets. Allow time to fully disperse. (Water soluble packets will initially float on the surface and should dissolve completely within 5 minutes.) Handling packets with hands should be minimized. Do not handle if hands or gloves are wet. Next add the recommended amount of the tank mix partner using the following order: dry formulations (e.g., wettable powders, dry flowables) first, liquid suspensions (e.g., flowables) next and finally liquids (e.g., EC's). Allow time for complete mixing and dispersion after each addition, adding water as necessary. Complete filling the sprayer tank with water. Maintain agitation during filling, mixing and application. Use Gauntlet tank mixtures immediately after mixing. Do not store tank mixtures.