

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

August 28, 2024

Catherine Rice Product Registration Manager FMC Corporation 2929 Walnut Street Philadelphia, PA 19104

Subject: Label Amendment - Registration Review Mitigation for Sulfentrazone & Dithiopyr Product Name: F9001-1 SC HERBICIDE EPA Registration Number: 279-3414 Application Dates: May 28, 2021 & August 23, 2024 Decision Numbers: 576139 & 596181

Dear Catherine Rice:

The Agency, in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Sulfentrazone and Dithiopyr Interim Decisions, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide, Fungicide, and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. You must submit one copy of the final printed labeling before you release the product for Page 2 of 2 EPA Reg. No. 279-3414 Decision No. 576139 & 596181

shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Caleb Carr by phone at (202) 566-0636, or via email at <u>carr.caleb@epa.gov</u>.

Sincerely,

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Linda Arrington, Branch Chief Risk Management and Implementation Branch 4 Pesticide Re-Evaluation Division Office of Pesticide Programs

ENCLOSURE: Stamped label

Sulfentrazone	Group	14	Herbicide
Dithiopyr	Group	3	Herbicide

F9001-1 SC Herbicide

For Preemergence and early postemergence control of crabgrass, selected annual grasses, sedges and annual broadleaf weeds in Turf Sites (Residential and Institutional Lawns, Athletic Fields, Commercial Sod Farms, Golf Course Fairways and Roughs); Roadsides, Utility right-of-ways, Railways, and Industrial areas.

EPA Reg. No. 279-3414	EPA Est	
Active Ingredients		
Sulfentrazone	16.74%	
Dithiopyr	22.26%	
Other Ingredients	61.0%	
-	100.0%	

F9001-1 SC herbicide contains 4.0 lb total active ingredient (1.674 lbs sulfentrazone and 2.226 lbs dithiopyr) per gallon product.

KEEP OUT OF REACH OF CHILDREN CAUTION

See [other][additional][[side][front][back]panels] [[inside] booklet] for additional precautionary information.



FMC Corporation 2929 Walnut Street Philadelphia PA 19104

Net Contents:



Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 279-3414

PEEL BACK BOOK HERE

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	FIRST AID		
IF ON SKIN OR	Take off contaminated clothing.		
CLOTHING	Rinse skin immediately with plenty of water for 15-20 minutes.		
	Call a poison control center or doctor for treatment advice.		
IF SWALLOWED	Call a poison control center or doctor immediately for treatment advice.		
	Do not give any liquid to the person.		
	• 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.		
MEDICAL HOTLINE NUMBER			
Have the product of	container or label with you when calling a poison control center or doctor, or going for		
treatment. You ma	y also contact 1-800-331-3148 for emergency medical treatment information.		

For Technical Support or information regarding the use of this product, Call 1-800-321-1FMC(1362)

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals CAUTION

Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Wear long-sleeved shirt and long pants, socks, shoes, and gloves. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, and 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.

User Safety Recommendations:

• Users should remove clothing immediately if product gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

This product 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 rinsate.

<u>NON-TARGET ORGANISM ADVISORY</u>: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift. For further guidance and instructions on how to minimize spray drift, refer to the Spray Drift Management section of this label.

<u>Groundwater advisory</u>: The active ingredients in this product are known to leach through soil into groundwater under certain conditions as a result of label use. Use of this product 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.

<u>Surface water advisory</u>: This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground. This product is classified as having a high potential for reaching surface water via runoff for several months after application.

DIRECTIONS FOR USE

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

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

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Re-entry Statement: Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment area until spray has dried.

PRODUCT INFORMATION

F9001-1 SC herbicide is a selective pre-emergence and post-emergence herbicide for control of crabgrass, annual grass and broadleaf weeds and sedges in turf sites including residential and institutional lawns, athletic fields, commercial sod farms, golf course fairways and roughs, roadsides, utility right-of-ways, railways and industrial areas.

F9001-1 SC herbicide is a flowable formulation (suspension concentrate) containing 4.0 lbs total active ingredient per gallon (1.674 lbs sulfentrazone and 2.226 lbs dithiopyr). The mode of action of F9001-1 SC herbicide involves uptake by both weed roots and shoots of existing weeds and prevention of growth by newly emerged weed seedlings.

WEED RESISTANCE MANAGEMENT

For resistance management, please note that F9001-1 SC herbicide contains both a Group 14/[Sulfentrazone] and a Group 3/ [Dithiopyr] herbicide as classified by the Weed Science Society (WSSA) classification group. Any weed population may contain plants naturally resistant to Group 14 and/or Group 3 herbicides. The resistant individuals may dominate the weed population if these herbicides are used repeatedly in the same area. Appropriate resistance-management strategies should be followed. To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of F9001-1 SC herbicide or other Group 14 and Group 3 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or pest control advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and that considers mechanical control methods, cultural (e.g., timing to favor the turf and not the weeds), biological (weed-competitive varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method. Prevent movement of resistant weed seeds to other areas by cleaning equipment.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.

Contact your FMC market specialist or university researcher for additional pesticide resistancemanagement and/or integrated weed-management recommendations for specific types of turf and weed biotypes.

MIXING AND APPLICATION INSTRUCTIONS

General 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 contained 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.

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.

Shake Well Before Using.

Spray Tank Preparation

It is important that spray equipment is clean and free of existing pesticide deposits before using this product. Follow the spray tank clean out procedures specified on the label of product previously applied before adding F9001-1 SC herbicide to the tank.

F9001-1 SC herbicide is a suspension concentrate intended for dilution with water.

Mixing With Water

For best results, fill spray tank with one fourth of the volume of clean water needed for the area to be treated. Start the agitation system and add F9001-1 SC herbicide to the tank. Make sure F9001-1 SC herbicide is thoroughly mixed before application or before adding another product to the spray tank.

Mixing With Liquid Fertilizers

The addition of a sprayable nitrogen fertilizer with a nitrogen percentage above 20% may increase herbicidal activity on certain weeds and decrease turf tolerance on desirable turfgrass cultivars. Utilize local recommendations for sources and rates of fertilizer and refer to mixing directions on the fertilizer labels (e.g. UAN or urea solutions). Determine the compatibility of this product with the desired fluid fertilizer by mixing small proportional quantities in advance (See the Tank Mixtures Compatibility section below).

Tank Mixtures Compatibility

F9001-1 SC herbicide is believed to be compatible with most herbicides, fungicides, insecticides, growth regulators, liquid fertilizers and spray adjuvants commonly used in turf and ornamental plant management. However, when preparing a new tank mix conduct an appropriate compatibility test by mixing proportional amounts of all spray ingredients in a test vessel (jar) prior to tank mixing with other products. Shake the mixture vigorously and allow it to stand for five to ten minutes. Rapid precipitation of the ingredients and failure to re-suspend when shaken indicates that the mixture is incompatible and should not be applied. Provided the jar test indicates the mixture to be compatible, prepare the tank mixture as follows: Fill the tank one fourth full with water. With the agitator operating, add the recommended amounts of ingredients using the following order: dry granules first and liquid suspensions (flowable) second. As the agitation continues and the tank is filled with water add EC products third followed by the addition of water soluble products.

Read and observe mixing instructions of all tank mix partners. Also read each product's label for Directions for Use, Precautionary Statements and Restrictions and Limitations. The most restrictive labeling applies in all tank mixtures. No label dosage rate should be exceeded. Tank mixture recommendations are for use only in states where the companion products and application site are registered. In addition, certain states or geographical regions may have established dosage rate limitations. Consult your state Pesticide Control Agency for additional information regarding the maximum use rates.

Use F9001-1 SC herbicide spray mixture immediately after mixing. Do not allow spray solutions to stand or dry in the tank.

Ground Equipment

<u>Power sprayers</u>: Uniform and accurate spray coverage requires proper calibration and operation of spray equipment. The use of marker dyes or foams can improve application accuracy. Boom sprayers equipped with appropriate flat fan nozzles, tips and screens are ideal for broadcast applications. Power sprayers fitted with spray wand/gun may also be used for broadcast application after careful calibration by the applicator. Power sprayers fitted with spray wand/gun are suitable for spot treatments. It is important to avoid over application of this product due to excessive overlapping or spot treatment.

<u>Hand operated sprayers</u>: Backpack and compression sprayers are appropriate for small turfgrass areas and spot treatments. Wands fitted with a flat fan nozzle tip should be held stationary at the proper height during application. A side-to-side or swinging arm motion may result in uneven coverage or excessive application.

Apply this product in a sufficient volume of carrier solution to provide a uniform spray distribution. Spray volumes of 20 - 175 gallons per acre (0.5 to 4.0 gal/1,000 ft²) with spray pressures adjusted to 20 - 40 psi are appropriate. Apply the higher spray volumes for dense weed populations.

Sprayer Equipment Clean-Out

After spraying F9001-1 SC 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. 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 plants.

SPRAY DRIFT MANAGEMENT

MANDATORY SPRAY DRIFT MANAGEMENT

Ground Boom Applications:

- User must only apply with the release height recommended by the manufacturer, but no more than 30 inches from the soil.
- Applicators are required to select the nozzle and pressure that deliver a medium or coarser droplet size (ANSI/ASAE) S572.3 FEB 2020.
- Select coarse to very coarse droplet size when this product is used as a preemergent/preplant application.
- Applicators may only apply when wind speed is between 3 and 10 mph.
- Do not apply during temperature inversions.
- Ground applicators must use a minimum finished spray volume of 10 gallons per acre. When this product is tank mixed with a contact burndown herbicide, ground applicators must use a minimum finished spray volume of 15 gallons per acre.

Boomless Ground Applications:

- Applicators are required to select the nozzle and pressure that deliver a medium or coarser droplet size (ANSI/ASAE) S572.3 FEB 2020.
- Select coarse to very coarse droplet size when this product is used as a preemergent/preplant application.
- Applicators may only apply when wind speed is between 3 and 10 mph.
- Do not apply during temperature inversions.
- Ground applicators must use a minimum finished spray volume of 10 gallons per acre. When this product is tank mixed with a contact burndown herbicide, ground applicators must use a minimum finished spray volume of 15 gallons per acre.

{Note to Reviewer: The following information is only required if the commercial label includes aerial uses (i.e., IVM)}

Aerial Applications:

- Aerial application is allowed only when environmental conditions prohibit ground application.
- The maximum release height must be 10 feet from the top of the canopy, unless a greater application height is required for pilot safety.

- Applicators are required to select the nozzle and pressure that deliver a medium or coarser droplet size (ANSI/ASABE) S641 May 2018.
- Select coarse to very coarse droplet size when this product is used as a preemergent/preplant application.
- Applicators may only apply when wind speed is between 3 and 10 mph.
- Do not apply during temperature inversions.
- When this product is allowed to be applied by air, applicator must use a minimum finished spray volume of 5 gallons per acre.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

BOOM HEIGHT – Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce. **SHIELDED SPRAYERS**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation. **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift. **Boomless Ground Applications:**

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Handheld Technology Applications:

Take precautions to minimize spray drift.

Weed Control in Turfgrass

Turfgrass Safety

This product may be used on seeded, sodded or sprigged turfgrasses that are well established. First application of this product can be made following the second mowing providing the grass has developed into a uniform stand with a good root system. Turf injury may result from application of this product on turf that is not well established or has been weakened by stresses such as unfavorable weather conditions, disease, chemical or mechanical influences.

F9001-1 SC herbicide application may cause temporary discoloration to exposed leaf surfaces on certain cultivars of zoysiagrass. Treated turfgrass will recover with new growth. Discolored leaf tissue will be removed with mowing. To reduce potential for discoloration, do not apply F9001-1 SC herbicide on turfgrass that is weakened by weather, mechanical, chemical, disease or other related stress. Maintain proper cultural practices such as adequate moisture and fertility levels to promote healthy turf growth.

Restrictions

- Do not apply to golf course putting greens or tees.
- Do not use on turfgrasses other than those listed on this label.
- Do not graze or feed livestock, forage cut from areas treated with F9001-1 SC herbicide.
- Do not apply to areas where dichondra, colonial bentgrass, velvet bentgrass or annual bluegrass (*Poa annua*) are desirable species.
- Do not apply to creeping bentgrass if mowing height is less than 0.5 inch.
- Do not apply to newly set sod until the sod has rooted and exposed edges have grown in.
- Do not mulch vegetables or fruit trees with clippings from turf treated with F9001-1 SC herbicide.
- For post emergent applications, do not apply with adjuvants or surfactants unless tested on small areas prior to broadcast applications.
- Do not apply more than 0.5 lbs dithiopry/acre per application.
- Do not apply more than 1.5 lbs dithiopyr/acre/year when applying any dithiopyr-containing product.
- Do not apply more than 0.375 lbs sulfentrazone/acre/year when applying any sulfentrazone-containing product.
- Do not apply aerially.

Use Precautions

- F9001-1 SC herbicide has demonstrated tolerance on both cool and warm season turfgrasses. However, not all varieties and or cultivars have been evaluated. Turfgrass managers desiring to treat newly released varieties should first apply F9001-1 SC herbicide to a small area prior to treatment of larger areas.
- Temporary turfgrass discoloration has been observed when Primo has been either tank-mixed or applied within 7 days of a F9001-1 SC herbicide application. It is recommended that Primo applications be made 7 days prior to, or after F9001-1 SC herbicide application to reduce risk of turfgrass discoloration.

Use rate conversion					
fl oz product	Ibs Sulfentrazone	lbs Dithiopyr	lbs total ai	fl oz product	
per 1000 sq ft	per acre	per acre	per acre	per acre	
0.28	0.16	0.21	0.37	12.2	
0.46	0.26	0.35	0.61	20.0	
0.65	0.37	0.49	0.86	28.3	

SPECIFIC INSTRUCTIONS FOR TURFGRASS

When applied as directed under the conditions described, the following established grasses are tolerant to F9001-1 SC herbicide at the recommended use rates in a range from 0.37 - 0.86 lb. total ai per acre (12.2 - 28.3 fl oz per acre or 0.28 - 0.65 fl oz per 1000 sq ft).

Table 4	Annlingtion	Detes for	Televent	~~~~~~
Table 1.	Application	Rales for	Tolerant	grasses

Table 1. Application Rates for Folerant grasses	Single Application Use Rates		
	Refer to the "per species" maximum single application use rates.		
Grass Type			
	This product may be applied more than once per year as long as the maximum annual application rate for each active is not exceeded.		
	fl oz per 1000 sq ft	fl oz per acre	
Cool Season Grasses			
Bentgrass, creeping ¹ Fescue, fine ² (<i>Festuca rubra</i>) Ryegrass, perennial (<i>Lolium perenne</i>)	0.28 - 0.65	12.2 - 28.3	
Bluegrass, Kentucky (Poa pratensis) Fescue, tall ² (Festuca arundinacea)	0.28 - 0.65	12.2 - 28.3	
Warm Season Grasses			
Bahiagrass (Paspalum notatum) Buffalograss (Buchloe dactyloides) Carpetgrass (Axonopus affinis) Centipedegrass (Eremochloa ophuiroides) Kikuyugrass (Pennisetum clandestinum) Seashore Paspalum (Paspalum vaginatum) Zoysiagrass (Zoysia japonica)	0.28 - 0.65	12.2 - 28.3	
Bermudagrass (<i>Cynodon dactylon</i>) & hybrids ³ 0.28 - 0.65 12.2 - 28.3			
1 If bentgrass is mowed lower than 0.5 inches do not apply F9001-1 SC herbicide. Do not use on the following cultivars or creeping bentgrass: Carmen, Cohansey, Seaside, and Washington. Colonial bentgrass is not tolerant to F9001-1 SC herbicide.			

- 2 Use of this product on certain varieties of Chewing, Fine Fescue or Tall Fescue cultivars may result in undesirable injury. The following varieties of Fine fescue have shown lack of tolerance to F9001-1 SC herbicide: Atlanta, Banner, Beauty, Bilgart, CF-2, Enjoy, HF-93, Highlight, Ivalo, Jamestown, Koket, Majenta, Pennlawn, Tamara, Tatjana, Waldorf and Waldina.
- 3 Do not use on hybrid bermudagrass 328 (Tifgreen).

Application to Reseeded, Overseeded or Sprigged Areas

Reseeding, overseeding or sprigging of treated areas within three to four (3-4) months after application of this product could inhibit the establishment of desirable grasses. However, perennial ryegrass may be overseeded into bermudagrass 8 weeks after application of F9001-1 SC herbicide if slight injury to the ryegrass is acceptable.

Best results are obtained for reseeding or overseeding when mechanical or power seeding equipment (slit seeders) are used to give good seed to soil contact and proper soil cultivation, irrigation and fertilization practices are followed.

Sod Production

It is recommended that sod be established for at least six (6) months before an application of F9001-1 SC herbicide.

Do not apply this product within three (3) months of harvest.

PREEMERGENCE CONTROL OF ANNUAL BROADLEAF WEEDS AND SEDGES

F9001-1 SC herbicide will control or suppress the weeds listed in Table 2 when applied prior to weed germination. Do not exceed the application rate specified for the turf species in Table 1.

Table 2. Weed Controlled with Preemergence Application				
Common Name	Scientific Name			
Barnyardgrass	Echinochloa crus-galli			
Bluegrass annual ¹	Poa annua			
Carpetweed	Mollugo verticillata			
Carolina Geranium	Geranium carolinianum			
Chickweed, common ²	Stellaria media			
Chickweed,mousear (from seed)	Cerastium vulgatum			
Crabgrass (large, Smooth, Southern) ³	Digitaria spp.			
Cupgrass, Woolly	Eriochloa villosa			
Dallisgrass	Paspulum dilatatum			
Foxtails, Annual	Setaria spp.			
Goosegrass ⁴	Eleusine indica			
Hairy Bittercress	Cardamine hirsute			
Henbit ²	Lamium amplexicaule			
Knotweed, prostrate	Polygonum aviculare			
Kochia	Kochia scoparia			
Kyllinga, green	Kyllinga brevifolia			
Kyllinga, false	Kyllinga gracillima			
Lambsquarters, common	Chenopodium album			
Lawn Burweed	Soliva pterosperma			
Lespedeza, common	Lespedeza striata			
Nutsedge, yellow	Cyperus esculentus			
Pancium (Texas,Fall)	Panicum spp.			
Pigweed, Redroot	Amaranthus retroflexus			
Purslane, Common	Portulaca oleracea			
Pusley, Florida	Richardia scabra L.			
Sedge, globe	Cyperus globulosus			
Sedge, cylindrical	Cyperus retrorsus			
Sedge, Surinam	Cyperus surinamensis			
Sedge, Texas	Cyperus polystachyos			
Shephardspurse ²	Capsella bursa-pastoris			
Speedwell	Veronica spp.			
Spurge, prostrate	Euphorbia humistrata			
Woodsorrel, yellow (from Seed)	Oxalis stricta			
4 Des surves is a winter survey Applications	of FOOO1 4 CO hardbisida abayda ha maada in Ayamustan			

Poa annua is a winter annual. Applications of F9001-1 SC herbicide should be made in August or September to established, non overseeded turf before Poa Annua germinates. Consult local Cooperative Extension Service for more specific applications timings for your local area since August and September are approximate timings.

- 2 Apply F9001-1 SC herbicide in late summer, fall or winter before weed germinates for control.
- 3 <u>Crabgrass control in cool season grasses from fall application:</u> Areas where the ground is subject to winter freezes, F9001-1 SC herbicide may be applied in the fall at rates listed in Table 1 for cool season grasses when soil temperatures are below 50°F, but prior to the ground freezing. This will provide control of crabgrass the following spring.
- 4 In areas of extended growing season and heavy pressure weed control will be enhanced by second application of F9001-1 SC herbicide 60-90 days after initial application.

POSTEMERGENCE CONTROL OF ANNUAL, BIENNIAL & PERENNIAL BROADLEAF WEEDS, GRASSES AND SEDGES

F9001-1 SC herbicide will control or suppress the weeds listed in Table 3 when applied shortly after weeds have emerged. Do not exceed the application rate specified for the turf species in Table 1.

Common Name	Scientific Name	Controlled	Suppressed
Bittercress	Cardamine spp.		Х
Black medic	Medicago lupulina		Х
Buttercups	Ranunculus spp.		Х
Carolina geranium	Geranium carolinianum	1	
Carpetweed	Mollugo verticillata		Х
Chickweed, common	Stellaria media	1	
Chickweed, mousear	Cerastium vulgatum		Х
Cinquefoil	Potentilla spp.		Х
Clover	Trifolium spp.		Х
Crabgrass (Large and Smooth)	Digitaria spp.	2	
Cudweed	Gnaphalium spp.		Х
Dandelion	Taraxacum officinale		Х
Dock, Curly	Rumex crispus		Х
Evening primrose	Oenothera biennis		Х
Fiddleneck	Amsinckia spp.		Х
Filaree	Erodium spp.		Х
Goldenrod	Solidago spp.	1	
Goosegrass	Eleusine indica	2	
Ground ivy	Glechema hederacea		Х
Henbit	Lamium amplexicaule		Х
Knotweed, prostrate	Polygonum aviculare		Х
Kochia	Kochia scoparia	1	
Lambsquarters, common	Chenopodium album		Х
Lawn burweed	Soliva pterosperma		Х
Lespedeza, common	Lespedeza striata		Х
Mallow, common	Malva neglecta		Х
Nutsedge, Yellow	Cyperus esculentus	1	
Parsley piert	Alchemilla arvensis	1	
Pigweed, Redroot	Amaranthus retroflexus	1	
Pigweed, Tumble	Amaranthus albus	1	
Pineapple weed	Matricaria matricarioides		Х
Plantain, buckhorn	Plantago lanceolata	1	
Puncture weed	Tribulus terrestris		Х
Purslane, common	Portulaca oleracea		Х
Pusley, Florida	Richardia scabra	1	
Redweed	Melochia corchorifolia		Х
Rocket, London	Sisymbrium irio		Х
Smartweed, Pennsylvania	Polygonum pensylvanicum	1	
Sorrel, Red	Rumex acetosella		Х
Speedwell	Veronica spp.	1	
Spurge, (annuals)	Euphorbia spp.	1	
Spurge, prostrate	Euphorbia humistrata	1	
Spurge, spotted	Euphorbia maculata	1	
Star of Bethlehem	Ornithogalum umbellatum	1	
Velvetleaf	Abutilon theophrasti		Х
Violet, wild	Viola pratincola		Х
Wild garlic	Allium vineale		Х

 Table 3. Weeds Controlled or Suppressed When Application Made Postemergence to Weeds

Common Name	Scientific Name	Controlled	Suppressed
Wild onion	Allium canadense		Х
Woodsorrel, creeping	Oxalis corniculata		Х
Woodsorrel, yellow	Oxalis stricta	1	

1 Weeds are suppressed at lower label rates (<0.61 lbs total ai per acre or <20 fl oz per acre). For optimum control apply rates of at least 20 fl oz per acre in a single application. Do not exceed the application rate specified for the turf species in Table 1.

2 F9001-1 SC herbicide provides early postemergence control of crabgrass and goosegrass when applied by the 2-4 tillering stage of development. Applications should be made as soon as undesirable grass is observed for best results.

Early Postemergence Control

Application of F9001-1 SC herbicide provides early postemergence control of crabgrass and goosegrass when applied by the 2-4 tillering stage of development. Applications should be made as soon as undesirable grass is observed for best results.

ADDITIONAL USE INSTRUCTIONS

Railroad Rights-of-Way

Controls many weeds and maintains bare ground on railroad rights-of-way, including railroad yards, railroad crossings and railroad bridge abutments.

Highway, Roadside, Pipeline and Utility Rights-of-Way

Controls many weeds and maintains bare ground in highway, roadside, pipeline and utility rights-of-way. Such areas would include, but are not limited to, guardrails, road shoulders, electric utility substations, pipeline pumping stations, around electric transmission towers, around distribution line poles plus other areas where complete vegetation control is desired.

Industrial Areas, Fence Rows and Other Non-crop Sites

Controls weeds and maintains bare ground in industrial areas including production facilities, tank farms, storage areas, parking areas, lumber yards, airports, military installations, along fence rows, and in similar non-crop sites where complete vegetation control is needed.

Use Restrictions

- Do not apply more than 0.5 lbs dithopyr/acre per application.
- Do not apply more than 1.5 lbs dithiopyr/acre/year when applying any dithiopyr-containing product.
- Do not apply more than 0.375 lbs sulfentrazone/acre/year when applying any sulfentrazonecontaining product.
- Aerial applications (helicopter) may only be made to railroad rights-of-way.

Use rate conversion				
fl oz product	Ibs Sulfentrazone	lbs Dithiopyr	lbs total ai	fl oz product
per 1000 sq ft	per acre	per acre	per acre	per acre
0.28	0.16	0.21	0.37	12.2
0.46	0.26	0.35	0.61	20.0
0.65	0.37	0.49	0.86	28.3

SPECIFIC INSTRUCTIONS FOR ADDITIONAL USES

PREEMERGENCE CONTROL OF ANNUAL BROADLEAF WEEDS AND SEDGES

When applied prior to weed germination, F9001-1 SC herbicide will control or suppress the weeds listed in Table 2 when applied prior to weed germination. Apply F9001-1 SC herbicide at a rate of 12.2 to 28.3 fl oz per acre.

To broaden the weed spectrum and increase effectiveness for certain weeds listed in Table 2, F9001-1 SC herbicide may be tank mixed with other EPA registered preemergence herbicides. Refer to the Tank Mixtures Compatibility section of this label to determine compatibility of tank mixtures. Consult the label for application instructions for each of the tank mix products. Follow all label restrictions, use directions and precautionary statements before using these tank mixtures. Control of emerged annual grass weeds may be improved by combining F9001-1 SC herbicide with other post emergence herbicides.

POSTEMERGENCE CONTROL OF ANNUAL, BIENNIAL & PERENNIAL BROADLEAF WEEDS AND SEDGES

F9001-1 SC herbicide will control or suppress the weeds listed in Table 3 when applied alone shortly after weeds have emerged. Apply F9001-1 SC herbicide at rates from 12.2 – 28.3 fl. oz per acre.

To broaden the weed spectrum and increase effectiveness for certain weeds listed in Table 3, F9001-1 SC herbicide may be tank mixed with other EPA registered postemergence herbicides. Refer to the Tank Mixtures Compatibility section of this label to determine compatibility of tank mixtures. Consult the label for application instructions for each of the tank mix products. Follow all label restrictions, use directions and precautionary statements before using these tank mixtures. Control of emerged annual grass weeds may be improved by combining F9001-1 SC herbicide with other registered post emergence herbicides.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store product in original container only, away from other pesticides, fertilizer, food or feed. Store in a cool, dry place and avoid excess heat.

Spill: 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: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

Pesticide 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:

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.

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 responsibility of the refiller. To 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.

CONDITIONS OF SALES AND LIMITATIONS 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 must 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 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 CONSISTENT WITH APPLICABLE LAW, 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 beyond the control of) seller or FMC, and to the extent consistent with applicable law, buyer assumes the risk of any such use.

To the extent consistent with 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 CONSISTENT WITH 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.