



## OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

August 14, 2024

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

Subject: Label Amendment - Registration Review Mitigation for Dithiopyr and Sulfentrazone  
Product Name: F9001-2 0.45G Herbicide on Fertilizer Homeowner Product  
EPA Registration Number: 279-9538  
Application Date: May 17, 2021 and August 1, 2024  
Decision Number: 575828, 596095

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 Dithiopyr and Sulfentrazone 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 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 Concepción Rodríguez by phone at 202-566-0820, or via email at [rodriguez.concepcion@epa.gov](mailto:rodriguez.concepcion@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Linda Arrington", with a stylized flourish at the end.

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

ENCLOSURE: Stamped label

## F9001-2 0.45 G HERBICIDE ON FERTILIZER HOMEOWNER PRODUCT

Ready-to-Spread Granules

For Pre-emergent and early post emergent control of crabgrass and other listed weeds in Residential Lawns

**EPA Reg. No. 279-9538**

**EPA Est.**

**Active Ingredient:**

Sulfentrazone\*

Dithiopyr

Other Ingredients:

**Total:** .....

**By Wt.**

0.194%

0.257%

99.549%

100.000%

F9001-2 0.45 G HERBICIDE ON FERTILIZER Homeowner Product contains 0.00451 pounds of active ingredient (0.00194 lb sulfentrazone and 0.00257 lb dithiopyr) per pound.

**Net Weight:**

**Guaranteed Analysis XX-X-XX**

**Total Nitrogen (N)** ..... XX.XX %

XX.XX% Urea Nitrogen

**Soluble Potash (K<sub>2</sub>O)** ..... XX.XX %

**Sulfur (S) Total** ..... XX.XX %

X.XX % Free Sulfur (S)

X.XX % Combined Sulfur (S)

**Iron (Fe) Total** ..... X.XX %

X.XX % Soluble Iron (Fe)

**Derived From:** Poly Coated Sulfur Coated Urea, Sulfate  
Of Potash, Iron Sucrate.

**Chlorine (Cl) Max.** ..... X.XX %

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See [other][additional][side][front][back][inside][booklet] for additional precautionary information.  
Read Entire Label for Precautionary Statements and complete Directions For Use

**ACCEPTED**

Aug 14, 2024

Under the Federal Insecticide, Fungicide  
and Rodenticide Act as amended, for the  
pesticide registered under  
EPA Reg. No. 279-9538

**FMC Corporation**  
**2929 Walnut Street**  
**Philadelphia, PA 19104**

FIRST AID	
IF SWALLOWED	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
IF IN EYES	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
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.	
For Information Regarding the Use of this Product Call 1-800-321-1FMC(1362)	

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

#### CAUTION

Harmful if swallowed.-Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Avoid contact with eyes, or clothing.

#### Personal Protective Equipment (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, chemical-resistant gloves, and shoes plus socks.

Discard clothing and other absorbent material 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 and put on clean clothing.

## Environmental Hazards

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

Sweeping any product that lands on a driveway, sidewalk, or street, back into the treated area of the lawn or garden will help to prevent runoff to water bodies or drainage systems.

**NON-TARGET ORGANISM ADVISORY:** 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.

**Groundwater advisory:** The active ingredients in this product have properties and characteristics associated with chemicals detected in the groundwater. This product may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

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

**Surface water advisory:** 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 weeks after application.

## DIRECTIONS FOR USE

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

## PRODUCT INFORMATION

F9001-2 0.45 G HERBICIDE ON FERTILIZER is a selective pre-emergence and early post-emergence herbicide for control of crabgrass, annual grasses, broadleaf weeds and sedges in established lawns. Damage may occur to lawns that are not well established or stressed by unfavorable weather or disease.

<b>When to use</b>	Before weeds or crabgrass appear or shortly after they emerge
<b>How much to use</b>	1.9 - 4.5 lbs per 1000 sq ft. See table for most common spreader settings.  SPREADER SETTINGS TABLE INSERTED HERE
<b>How to use</b>	Adjust spreader to proper setting. To insure you cover entire area uniformly, first treat the border of the lawn, then fill in the rest of the lawn, making parallel passes to cover lawn, walking at a steady pace.
<b>For Best Results</b>	<ul style="list-style-type: none"> <li>Works best when adequate soil moisture is present at application. If soil is very dry, water 1-2 days before applying.</li> <li>If no rainfall or watering occurs within 1-2 days after application of F9001-2 0.45 G HERBICIDE ON FERTILIZER, then light watering is recommended.</li> </ul> <p>This product may be used on seeded, sodded or sprigged lawns that are well established. Turfgrass injury could result from application of this product on turfgrass that is not well established or has been weakened by stresses such as high traffic, unfavorable weather conditions or disease. If turfgrass becomes injured and discolored, it will recover and discoloration removed by mowing.</p>
<b>For use on these grasses</b>	<p>F9001-2 0.45 G HERBICIDE ON FERTILIZER can be used as directed on the following grass types:</p> <p><u>Cool Season Grasses {Turf}{Lawns}:</u>            Bentgrass, creeping (Agrostis spp.)            Kentucky Bluegrass (Poa pratensis)            Fine Fescue, (Festuca rubra)            Tall Fescue (Festuca arundinacea)            Ryegrass, perennial (Lolium perenne)</p> <p><u>Warm Season Grasses {Turf}{Lawns}:</u>            Bermudagrass (Cynodon dactylon) &amp; hybrids            Buffalograss (Buchloe dactyloides)            Centipedegrass (Eremochloa ophiuroides)            Seashore Paspalum (Paspalum vaginatum)            Zoysiagrass (Zoysia japonica)            Kikuyugrass (Pennisetum clandestinum)</p>
<b>Restrictions and Other Use Precautions</b>	<p><b>NOTE:</b> If your grass type is not listed you should not use F9001-2 0.45 G HERBICIDE ON FERTILIZER. If you are not sure of your grass type, you may want to treat small area first to see if grass is tolerant. F9001-2 0.45 G HERBICIDE ON FERTILIZER will not harm the grass when used as directed.</p> <p><b>Do not</b> apply product in a way that will contact people or pets. After watering, keep people and pets off treated areas until completely dried.</p> <p><b>Do not</b> treat pastures, rangeland, or other areas grazed or harvested for livestock forage or hay.</p> <p><b>Do not</b> apply this product through any type of irrigation system.</p> <p><b>Do not</b> use on turfgrasses other than those listed on this label.</p> <p><b>Do not</b> use on St. Augustinegrass.</p> <p><b>Do not</b> apply to turfgrasses under stress.</p> <p><b>Do not</b> apply to golf course putting greens, collars or tees.</p> <p>To avoid injuring or killing desirable plants:  <b>Do not</b> apply directly to landscape ornamentals or ornamental beds other than those listed.  <b>Do not</b> use clippings as mulch or compost around flowers, ornamentals, trees or in vegetable gardens.</p>

### [Optional Quick Reference Chart]

PRODUCT USAGE	
<b>Kills</b>	Pre-emergent and early post-emergent control of Crabgrass, Annual grasses, broadleaf weeds and annual and perennial sedges in established lawns {grasses}{turf}
<b>Use On</b>	Cool Season Lawns {Grasses}{Turf}: Bentgrass (creeping), Bluegrass (Kentucky and Rough), Fescue (Fine and Tall) and Perennial Rye Warm Season Lawns {Grasses}{Turf}: Bermudagrass (Common and Hybrid), Buffalograss, Centipedegrass, Seashore Paspalum and Zoysiagrass. Do Not use on St. Augustinegrass.
<b>Amount to Use</b>	1.9 – 4.5 lbs per 1000 sq ft of lawn.
<b>When to Use</b>	Before weeds emerge or shortly after they emerge.

### WEEDS CONTROLLED WITH PRE-EMERGENT APPLICATION

Common Name	Scientific Name
Barnyardgrass	( <i>Echinochloa crus-galli</i> )
Bluegrass annual <sup>1</sup>	( <i>Poa annua</i> )
Carpetweed	( <i>Mollugo verticillata</i> )
Carolina Geranium	<i>Geranium carolinianum</i>
Chickweed, common <sup>2</sup>	( <i>Stellaria media</i> )
Chickweed, mouseear (from seed)	( <i>Cerastium vulgatum</i> )
Crabgrass (large, Smooth, Southern) <sup>3</sup>	( <i>Digitaria spp.</i> )
Cupgrass, Woolly	( <i>Eriochloa villosa</i> )
Dallisgrass	( <i>Paspalum dilatatum</i> )
Foxtails, Annual	( <i>Setaria spp.</i> )
Goosegrass <sup>4</sup>	( <i>Eleusine indica</i> )
Hairy Bittercress	<i>Cardamine hirsute</i>
Henbit <sup>2</sup>	( <i>Lamium amplexicaule</i> )
Knotweed, prostrate	( <i>Polygonum aviculare</i> )
Kochia	( <i>Kochia scoparia</i> )
Kyllinga, green	( <i>Kyllinga brevifolia</i> )
Kyllinga, false	( <i>Kyllinga gracillima</i> )
Lambsquarters, common	( <i>Chenopodium album</i> )
Lawn Burweed	( <i>Soliva pterosperma</i> )
Lespedeza, common	( <i>Lespedeza striata</i> )
Nutsedge, yellow	( <i>Cyperus esculentus</i> )
Panicum (Texas, Fall)	( <i>Panicum spp.</i> )
Pigweed, Redroot	( <i>Amaranthus retroflexus</i> )
Purslane, Common	( <i>Portulaca oleracea</i> )
Pusley, Florida	( <i>Richardia scabra L.</i> )
Sedge, globe	( <i>Cyperus globulosus</i> )
Sedge, cylindrical	( <i>Cyperus retrorsus</i> )
Sedge, Surinam	( <i>Cyperus surinamensis</i> )
Sedge, Texas	( <i>Cyperus polystachyos</i> )
Shephardspurse <sup>2</sup>	( <i>Capsella bursa-pastoris</i> )
Speedwell	( <i>Veronica spp.</i> )
Spurge, prostrate	( <i>Euphorbia humistrata</i> )
Woodsorrel, yellow (from Seed)	( <i>Oxalis stricta</i> )

1. *Poa annua* is a winter annual. Applications of F9001-2 0.45 G HERBICIDE ON FERTILIZER 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 F9001-2 0.45 G HERBICIDE ON FERTILIZER in late summer, fall or winter before weed germinates for control.
3. Crabgrass control in cool season grasses from fall application: Areas where the ground is subject to winter freezes, F9001-2 0.45 G HERBICIDE ON FERTILIZER may be applied in the fall at rates listed in Table 1 (83 -194.5 lbs. per acre) 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 F9001-2 0.45 G HERBICIDE ON FERTILIZER 60-90 days after initial application.



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

F9001-2 0.45 G HERBICIDE ON FERTILIZER will control or suppress the weeds listed below when applied shortly after weeds have emerged.

### Weeds Controlled or Suppressed When Application Made Postemergence to Weeds

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

1. Weeds are suppressed at lower label rates (<83 lbs/acre). For optimum control apply rates of at least 100 lbs per acre in a single application. Do not exceed the application rate specified for the turf species in Table 1.
2. F9001-2 0.45 G HERBICIDE ON FERTILIZER controls crabgrass and goosegrass when applied postemergent to newly emerged weeds from the 1-4 leaf to the 2-4 tillering stage has been initiated.

#### **Early Postemergence Control**

Application of F9001-2 0.45 G HERBICIDE ON FERTILIZER 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.

### **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.

Store in a cool, dry place and avoid excess heat.

#### **Pesticide Disposal**

If product 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. Never dump unused pesticides down a drain.

#### **Container Disposal**

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available or place in trash.

### **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 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 of FMC or Seller. 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, 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 beyond the control of) seller or FMC, and 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.

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### **Optional Warranty Statement:**

#### **WARRANTY- CONDITIONS OF SALE**

RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather conditions, mixtures with other chemicals and other influencing factors in the use of this product are, to the extent consistent with applicable law, beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

**OR**

**NOTICE:** To the extent consistent with applicable law, Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this material when such use and/or handling is contrary to label instructions.