



U.S. ENVIRONMENTAL PROTECTION AGENCY
 Office of Pesticide Programs
 Registration Division (7505P)
 1200 Pennsylvania Ave., N.W.
 Washington, D.C. 20460

EPA Reg. Number:

279-3615

Date of Issuance:

4/18/17

NOTICE OF PESTICIDE:

Registration
 Reregistration
 (under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

F4189-1

Name and Address of Registrant (include ZIP Code):

Lael Jimenez
 FMC Corporation
 2929 Walnut Street
 Philadelphia, PA 109104

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Elyssa Arnold

Elyssa Arnold, Acting Product Manager 01
 Invertebrate & Vertebrate Branch 3, Registration Division (7505P)

Date:

4/18/17

2. You are required to comply with the data requirements described in the DCI and EDSP Orders identified below:
 - a. Thiamethoxam GDCI-060109-1308
 - b. Difenconazole GDCI-128847-1602
 - c. Tebuconazole EDSP-128997-153
 - d. Thiophanate-methyl GDCI-102001-1439

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI or EDSP Order listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division:

<http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1>

3. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.
4. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, “EPA Reg. No. 279-3615.”
5. Submit one copy of the final printed label for the record before you release the product for shipment.

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.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 03/2/2017

If you have any questions, please contact Jacquelyn Herrick by phone at 703-347-0559, or via email at herrick.jacquelyn@epa.gov.

Enclosure

ACCEPTED

04/18/2017

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 279-3615

Group	1	3	4	Fungicide
Group	4A			Insecticide

F4189-1

EPA Reg. No. 279-_____

EPA Est. No. _____

Active Ingredient:**By Wt.**

Thiamethoxam	10.93%
Mefenoxam	1.09%
Difenoconazole	4.37%
Tebuconazole	0.36%
Thiophanate-methyl	3.57%
Other Ingredients.	<u>79.68%</u>
	100.0%

This product contains 1.02 pounds of thiamethoxam, 0.10 pounds of mefenoxam, 0.41 pounds of difenoconazole, 0.03 pounds of tebuconazole, and 0.33 pounds of thiophanate-methyl active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN
CAUTION

See other panels for additional precautionary information.

First Aid	
If Swallowed:	-Call a poison control center or doctor immediately for treatment advice. -Have person sip a glass of water if able to swallow. -Do not induce vomiting unless told to do so by a poison control center or doctor. -Do not give anything by mouth to an unconscious person.
If on Skin or Clothing:	-Take off contaminated clothing. -Rinse skin immediately with plenty of water for 15-20 minutes. -Call a poison control center or doctor for treatment advice.
If Inhaled:	-Move person to fresh air. -If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth if possible.
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.
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.	



Sold By
FMC Corporation
2929 Walnut Street
Philadelphia, PA 19104

Net Contents:**Batch Codes:**

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed. Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash before reuse.

Handlers who may be exposed to the concentrate through mixing, loading, application or other tasks must wear:

- Long-sleeved shirt
- Long pants
- Chemical-resistant gloves made of: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, viton ≥ 14 mils.
- Shoes plus socks

User Safety Requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Environmental Hazards

This pesticide is extremely toxic to fish, aquatic invertebrates, oysters and shrimp, and terrestrial wildlife. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

Pollinator Precautions

Thiamethoxam is highly toxic to bees exposed to direct treatment, and effects may be possible as a result of exposure to translocated residues in blooming crops.

Ground Water Advisory

Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Mefenoxam and tebuconazole are known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Surface Water Advisory

This product may impact surface water quality due to runoff of rain water. This product has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination

of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted within 48 hours.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Use Restrictions

Not for use on agricultural establishments in hopper box, planter box, slurry box or other seed treatment applications at or immediately before planting.

Do not use treated seed for food, feed or oil purposes. Care must be exercised in the handling of treated seed. Augers used for handling treated seed should not be used to move seed for feed, food or oil processing. Do not re-use bags from treated seed to handle food or feed products.

PRODUCT INFORMATION

F4189-1 is a seed treatment product containing the active ingredients: thiamethoxam (insecticide) and difenoconazole, tebuconazole, thiophanate-methyl and mefenoxam (fungicides). Thiamethoxam is a systemic seed treatment insecticide belonging to the neonicotinoid class of chemistry. Thiamethoxam protects against certain chewing and sucking insects through contact and ingestion. Mefenoxam fungicide is active against Pythium. Difenoconazole and tebuconazole fungicides are active against several seed, soil and foliar diseases, as listed in the table in the Crop Use Directions section. Thiophanate-methyl fungicide is active against several seed borne diseases.

F4189-1 protects against damage from certain early season insects and against certain seed and soil-borne diseases of cereal crops.

MIXING PROCEDURES

Always re-circulate F4189-1 thoroughly before using. Continuous agitation or mixing of the slurry mixture is necessary to prevent settling out of the solution

F4189-1 is a ready-to-use water-based formulation for use in commercial seed treatment facilities according to label instructions. In addition, F4189-1 may be applied using on-site/on-farm applications. Apply F4189-1 as a water-based slurry utilizing standard slurry seed treatment equipment which provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of insect and disease control. Follow the manufacturer application instructions for the seed treatment equipment being used.

Other tank mix partners may be used with F4189-1; however, the user must consider the use rate, formulation, seed and crop safety factors and compatibility of each product to be mixed when determining the total application volume.

Allow seed to dry before bagging.

F4189-1 contains an EPA approved dye/colorant that imparts an unnatural color to the seed as required by the Federal Seed Act.

SEED BAG LABEL REQUIREMENTS

The Federal Seed Act requires that bags containing treated seeds shall be labeled with the following statements:

- This seed has been treated with thiamethoxam insecticide and difenoconazole, tebuconazole, Thiophanate-methyl and mefenoxam fungicides.
- Do not use treated seed for feed, food, or oil purposes.
- User is responsible for ensuring that the seed bag meets all requirements under the Federal Seed Act.

In addition, the U.S. Environmental Protection Agency requires the following statements on bags containing seeds treated with F4189-1:

- Pollinator Precaution: Thiamethoxam is highly toxic to bees, and effects are possible as a result of exposure to translocated residues in blooming crops.
- Ground Water Advisory: Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.
- Mefenoxam and tebuconazole are known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.
- Store treated seed away from food and feedstuffs.
- Do not allow children, pets or livestock to have access to treated seeds.
- Wear long pants, long-sleeved shirt and protective gloves when handling treated seed.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading and planting.
- Dispose of all excess treated seed. Leftover treated seed should be double sown around the headland or buried away from water sources in accordance with local requirements.
- Do not contaminate bodies of water when disposing of planting equipment wash water.
- Dispose of seed packaging or containers in accordance with local requirements.
- For seed treated with F4189-1, do not graze or feed livestock on treated areas for 45 days after planting.
- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in the ethanol by-products that are used in agronomic practice.
- This seed has been treated with X milligrams of thiamethoxam, X milligrams of mefenoxam, X difenoconazole, X tebuconazole and X thiophanate methyl/ seed.
- Do not use at a rate that will result in more than 0.05 lb thiamethoxam/acre/calendar year as a seed treatment.
- Treated seed must be planted at a depth greater than 0.5 inch.

ROTATIONAL CROPS (PLANTBACK RESTRICTIONS):

- The following crops may be planted immediately from the date the F4189-1 treated seed was planted: wheat and triticale
- The following crops may be planted 30 days from the date the F4189-1 treated seed was planted: Alfalfa, Brassica (cole) leafy vegetables, buckwheat, corn, pearl millet, proso millet, popcorn, rice (dry-seeded), sorghum, teosinte, wild rice, cotton, cucurbit vegetables, dry bulb onions, fruiting vegetables, leafy vegetables, legume vegetables, mint (peppermint and spearmint), oil seed crops (black mustard seed, flax seed, Indian mustard seed, Indian rapeseed seed, peanuts, rapeseed seed, and safflower seed), root vegetables, strawberry, sunflowers, tobacco, and tuberous and corm vegetables.

CROP USE PRECAUTIONS

Resistance Management

F4189-1 contains thiamethoxam, a Group 4A insecticide; mefenoxam, a Group 4 fungicide; and difenoconazole and tebuconazole, Group 3 fungicides.

Some insects and strains of fungi are known to develop resistance to products used repeatedly. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product or other products with similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

Crop, Pests and Application Rate:

Apply at 3.85 fl. oz. per cwt of seed

Crop	Pests		
	Insects Protected Against	Diseases Controlled	Diseases Suppressed
Triticale	Wireworms European Chafer Aphids Reduce the spread of barley yellow dwarf due to aphid vectors	General Seed Rots Seedling Blight and Damping Off caused by seed and/or soil-borne <i>Fusarium</i> , <i>Aspergillus</i> , <i>Penicillium</i> , <i>Cochliobolus</i> and <i>Pythium</i>	Common Root Rot (<i>Cochliobolus</i> spp.) <i>Fusarium</i> Crown and Foot Rot Early Season <i>Rhizoctonia</i> Root Rot
Spring Wheat including durum wheat	Wireworms European Chafer Aphids Reduce the spread of barley yellow dwarf due to aphid vectors	General Seed Rots Seedling Blight, Root Rot and Damping Off caused by seed and/or soil-borne <i>Fusarium</i> , <i>Aspergillus</i> , <i>Penicillium</i> , <i>Cochliobolus</i> and <i>Pythium</i> Common Bunt Loose Smut	Common Root Rot (<i>Cochliobolus</i> spp.) <i>Fusarium</i> Crown and Foot Rot Take-All Early Season <i>Rhizoctonia</i> Root Rot
Winter Wheat	Wireworms European Chafer Aphids Reduce the spread of barley yellow dwarf due to aphid vectors	General Seed Rots Seedling Blight, Root Rot and Damping Off caused by seed and/or soil-borne <i>Fusarium</i> , <i>Aspergillus</i> , <i>Penicillium</i> , <i>Cochliobolus</i> and <i>Pythium</i> Common Bunt Loose Smut	Common Root Rot (<i>Cochliobolus</i> spp.) Early Season <i>Rhizoctonia</i> Root Rot <i>Fusarium</i> Crown and Foot Rot Take-All

ROTATIONAL CROPS (PLANTBACK RESTRICTIONS)

- The following crops may be planted immediately from the date the F4189-1 treated seed was planted: wheat and triticale
- The following crops may be planted 30 days from the date the F4189-1 treated seed was planted: Alfalfa, Brassica (cole) leafy vegetables, buckwheat, corn, pearl millet, proso millet, popcorn, rice (dry-seeded), sorghum, teosinte, wild rice, cotton, cucurbit vegetables, dry bulb onions, fruiting vegetables, leafy vegetables, legume vegetables, mint (peppermint and spearmint), oil seed crops (black mustard seed, flax seed, Indian mustard seed, Indian rapeseed seed, peanuts, rapeseed seed, and safflower seed), root vegetables, strawberry, sunflowers, tobacco, and tuberous and corm vegetables.
- For any other crop, the minimum plant back interval is 120 days from the date the F4189-1 treated seed was planted. A cover crop other than the crops listed above that is planted for erosion control or soil improvement may be planted sooner than the 120 day interval; however, the crop may not be grazed or harvested for food or feed.

STORAGE AND DISPOSAL

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

Pesticide Storage

Do not freeze. Do not store below 40° F. If crystals are observed, warm material to above 60° F by placing container in warm location. Shake or roll container periodically to redissolve solids. Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal. In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call FMC: 1-(800)-331-3148. 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

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

Container Handling

Metal or Plastic Container: Non-refillable container. Do not reuse or refill this container. Triple rinse as follows: Empty the contents into application equipment or a mix tank and drain for 10 seconds after flow begins to drip. Fill container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or 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, if appropriate, or puncture and dispose of in a sanitary landfill.

Returnable/Refillable Sealed Container: Refill this container with pesticide only. Do not reuse this container for any other purpose. Do not rinse container. Do not empty remaining formulated product. Do not break seals. Return intact to point of purchase. 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.

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, to the extent consistent with applicable law, 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, to the extent consistent with applicable law, buyer assumes the risk of any such use.

Treatment of seed, especially seed that is mechanically damaged or seed known to be of low vigor and poor quality, may result in reduced germination and/or reduction of seed and seedling vigor. Treat and conduct germination tests on a small test sample of seed before treating commercial quantities with a selected chemical treatment that includes this product. Due to seed quality and seed storage conditions beyond the control of FMC, FMC makes no claims or guarantees as to germination of carry-over seed.

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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