

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON. DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

July 27, 2015

Mr. Evan Parenti Product Registration Manager FMC Corporation 1735 Market St. Philadelphia, PA 19103

Subject: Label Amendment – Add additional grass species to weeds controlled list and

minor revisions to directions for use

Product Name: F7119 Turf and IVM Herbicide

EPA Registration Number: 279-3351

Application Date: 03/26/2015 Decision Number: 503508

Dear Mr. Parenti:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. 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 18 months from the date of this letter. After 18 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.

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.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

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with FIFRA section 6. If you have any questions, please contact Kathryn Montague by phone at 703-305-1243, or via email at montague.kathryn@epa.gov.

Sincerely,

Kathryn V. Montague, Product Manager 23

Herbicide Branch

Registration Division (7505P) Office of Pesticide Programs

Enclosure

F7119 Turf and IVM Herbicide

For Selective Weed Control in turf Including Residential, Commercial and institutional Lawns, Athletic Fields, Commercial Sod Farms, Golf Course Fairways and Roughs, Railroad Rights-of-Way, Highway, Roadside, Pipeline and Utility Rights-of-Way, Industrial Areas, Fence Rows and Other Non-crop Sites.

For use on warm season Turfgrass, excluding St. Augustine and Seashore Paspalum.

EPA Reg. No. 279-3351	EPA Est. XXX
Active Ingredient:	By Wt.
Sulfentrazone*	33.33%
Imazethapyr*	6.67%
Other Ingredients:	60.00%
Total:	100.00%

F7119 Turf and IVM Herbicide contains 4 pounds of active ingredient per gallon of product (3.33 pounds a.i. of F7119 and 0.67 pounds a.i. of imazethapyr)

U.S. Patent No. XXXXXXXXXX

KEEP OUT OF REACH OF CHILDREN

CAUTION

See other panels for additional precautionary information.



FMC Corporation Agricultural Products Group 1735 Market Street Philadelphia, PA 19103

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ACCEPTED

07/27/2015

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 279-3351

	FIRST AID
IF INHALED	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF IN EYES	 Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF 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 to an unconscious person.
LIOTI INF NUMBER	

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

Causes moderate eye irritation. Harmful if inhaled, swallowed, or absorbed through skin. Avoid breathing vapor or spray mist. Avoid contact with skin, eyes or clothing.

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

Engineering Controls Statement:

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

User Safety Recommendations:

Users should:

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

Environmental Hazards

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

<u>Groundwater advisory</u>: This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

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

<u>Surface water advisory:</u> F7119 Turf and IVM Herbicide can contaminate surface water through spray drift. Under some conditions, F7119 Turf and IVM Herbicide may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several to many months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-lying tile drainage systems that drain to surface waters.

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, chemical-resistant gloves made of any waterproof material, 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.

Mixing and Application Instructions

General handling instructions

This product must not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.

Operations that involve mixing, loading, rinsing or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well, are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

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

SPRAY DRIFT MANAGEMENT

Aerial Applications:

Applicators are required to use a coarse or coarser droplet size (ASABE S572) or, if specifically using a spinning atomizer nozzle, applicators are required to use a volume mean diameter (VMD) of 385 microns or greater for release heights below 10 feet; Applicators are required to use a Very Coarse or coarser droplet size or, if specifically using a spinning atomizer nozzle, applicators are required to use a VMD of 475 microns or greater for release heights above 10 feet; Applicators must consider the effects of nozzle orientation and flight speed when determining droplet size.

Applicators are required to use upwind swath displacement.

The boom length must not exceed 60% of the wingspan or 90% of the rotor blade diameter to reduce spray drift.

Applications with wind speeds less than 3 mph and with wind speeds greater than 10 mph are prohibited.

Applications into temperature inversions are prohibited.

Ground Boom Applications:

Applicators are required to use a nozzle height below 4 feet above the ground or plant canopy and Coarse or coarser droplet size (ASABE S572) or, if specifically using a spinning atomizer nozzle, applicators are required to use a volume mean diameter (VMD) of 385 microns or greater.

Applications with wind speeds greater than 10 mph are prohibited.

Applications into temperature inversions are prohibited.

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 F7119 Turf and IVM Herbicide to the tank.

F7119 Turf and IVM Herbicide is a suspension concentrate intended for dilution with water. In certain applications, liquid fertilizer may replace water as diluent.

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 F7119 Turf and IVM Herbicide to the tank. Make sure F7119 Turf and IVM Herbicide is thoroughly mixed before application or before adding another product to the spray tank.

USE OF SURFACTANTS

Temporary discoloration of some turf types may result from use of surfactants or adjuvants with F7119 Turf and IVM Herbicide. High temperatures and high relative humidity may increase the risk of temporary discoloration. Do not apply with surfactants unless previous experience has demonstrated combinations with surfactants to be physically compatible and non-injurious to the grass type in question.

MIXING WITH LIQUID FERTILIZERS

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

F7119 Turf and IVM 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 resuspend 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 ingredients using the following order: dry granules first, and liquid suspensions (flowables) 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. Do not exceed any labeled dosage rates. 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 F7119 Turf and IVM Herbicide spray mixture immediately after mixing. Do not store the mixture.

Ground Equipment

Power sprayers: 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.

Hand operated sprayers: 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 can result in uneven coverage.

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 F7119 Turf and IVM 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.

APPLICATION INSTRUCTIONS

Railroad Rights-of-Way

F7119 Turf and IVM Herbicide can be used to control many weeds and maintain bare ground on railroad rights-of-way, including railroad yards, railroad crossings and railroad bridge abutments.

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

F7119 Turf and IVM Herbicide can be used to control many weeds and maintain bare ground in highway, roadside, pipeline and utility rights-of-way, Such areas would include, but are not limited to, guard rails, road shoulders, electric utility substations, pipeline pumping stations, around electric transmission towers, around distribution line poles and in other areas where complete vegetation control is desired.

Industrial Areas, Fence Rows and Other Non-crop Sites

F7119 Turf and IVM Herbicide is 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.

Method and Rate of Application

For residual control of germinating weeds in non-crop land, apply this product as a broadcast treatment at 9.5 to 14.4 fluid ounces (0.290 to 0.450 pounds active ingredient) per acre by ground in a minimum of 10 gallons of spray solution per acre. Applications may be made by helicopter on railroad rights-of-way only.

DO NOT apply F7119 Turf and IVM Herbicide to soils classified as sand with less than 1% Organic Matter.

Use labeled rates of burndown herbicides such as glyphosate, glyphosate - trimesium, diquat, 2,4-D, dicamba,etc. as tank mixtures with F7119 Turf and IVM Herbicide. Use recommended adjuvants for the herbicide tank mix partner. For all products used in tank mixes, refer to the specific product labels for all restrictions on tank mixing and observe the most restrictive label precautions, instructions and rotational cropping restrictions.

Do not apply F7119 Turf and IVM Herbicide at rates higher than 12 fl oz/ac in North Dakota or north of highway 210 in Minnesota.

Do not apply more than 0.375 lbs of sulfentrazone per acre per 12 month period. The 12 month period starts at the point of first application.

Timing

For best results, apply F7119 Turf and IVM Herbicide alone or in combination with other herbicides for residual control of weeds in late summer, fall, or early spring to ensure adequate moisture for soil activation.

Weeds Controlled

This product, when applied at 9.5 to 14.4 fluid ounces per acre, will control the following weeds in non-cropland areas. Use the higher labeled rates to extend length of control. Use the higher rates on sites with fine soil textures and on sites with more than 2% organic matter.

Weeds Controlled		
Beggarweed, Florida	Desmodium tortuosum	
Carpetweed	Mollugo verticillata	
Chickweed, common	Stellaria media	
Copperleaf, Hophornbeam	Acalypha ostryifolia	
Crabgrass species	Digitaria spp.	
Croton, tropic	Croton glandulosus	
Daisy, American	Coreopsis grandiflora	
Dayflower, common	Commelina communis	
Dayflower, Virginia	Commelina virginica	
Dock, curly	Rumex crispus	
Fixweed	Descurainia Sophia	
Galinsoga, hairy	Galinsoga ciliata	
Goosegrass	Eleusine indica	
Groundcherry, clammy (seedling)	Physallis heterophylla	
Groundcherry, cutleaf	Physalis angulata	
Jimsonweed	Datura stramonium	
Kochia	Kochia scoparia	
ALS/Triazene Resistant Kochia	Kochia scoparia	
Lambsquarter, common	Chenopodium album	
Lettuce, wild	Lactuca virosa	
Mallow, common	Malva neglecta	
Milkweed, honeyvine	Ampelamus albidus	
Mexicanweed	Caperonia castanifolia	
Morningglory species	Ipomoea spp.	
Mustard species	Brassica spp.	
Nightshade species	Solanum spp.	
Nutsedge species	Cyperus spp	
Palmer amaranth	Amaranthus palmeri	
Pigweed, smooth	Amaranthus hybridus	
Pigweed, redroot	Amaranthus retroflexus	
Texasweed	Caperonia palustrus	
Thistle, Russian	Salsola iberica	
Waterhemp, tall	Amaranthus tuberculatus	
Waterhemp, common	Amaranthus rudis	

Turf Use Instructions General Information

F7119 Turf and IVM Herbicide is a selective pre-emergence and post emergence herbicide which controls annual grasses, broadleaf weeds and sedges in established turf areas including, but not limited to, residential, commercial and institutional lawns, athletic fields, commercial sod farms, golf course fairways and golf course roughs. To broaden the spectrum for pre-emergence control or suppression of annual grasses and/or broadleaf weeds, F7119 Turf and IVM Herbicide may be tank mixed with an EPA-registered annual grass herbicide. Observe all instructions, mixing directions, application precautions and other label information of each product when tank mixing with F7119 Turf and IVM Herbicide.

F7119 Turf and IVM Herbicide is formulated as a flowable (suspension concentrate) containing 4 lbs of active ingredient per gallon. The mode of action of F7119 Turf and IVM Herbicide involves uptake by both weed roots and shoots. Pre-emergence application of F7119 Turf and IVM Herbicide requires soil moisture for activation. The amount of soil moisture required for activation following application depends on existing soil moisture, organic matter content and soil texture. The most effective pre-emergence weed control will be obtained when F7119 Turf and IVM Herbicide is activated by up to 0.5 inches of rainfall or irrigation within 7 days after application and prior to weed seed germination.

Weed Control in Turfgrasses

Use Precautions for Turf Use

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 turfgrass has developed into a uniform stand with a good root system. Turfgrass injury could result from application of this product on turfgrass that is not well established or has been weakened by stresses such as unfavorable weather conditions, disease, chemical or mechanical influences.

When applied as directed under the conditions described, the following established turfgrasses are tolerant to F7119 Turf and IVM Herbicide at the listed use rates in a range from 0.125 to 0.450 lb a.i./acre (4 to 14.4 fl. oz/acre or 0.092 to 0.331 fl. oz./1,000 sq. ft).

Table 1. Tolerant grasses.

Grass Type*	Sin	Use Rate gle Applicatio	n
Cool Season Grasses	Ib ai/A	Fluid ounces per 1000 ft ²	Fluid ounces per acre
Bluegrass, Kentucky (Poa pratensis) Bluegrass, Rough ² (Poa trivialis) Fescue, fine ¹ (Festuca rubra) Fescue, tall ¹ (Festuca rundinacea) Ryegrass, perennial (Lolium erenne)	0.125 - 0.290	0.092 - 0.220	4.0 -9.5
Warm Season Grasses Bahiagrass² (Paspalum notatum) Bermudagrass (Cynodon dactylon) & hybrids Buffalograss (Buchloe dactyloides) Carpetgrass (Axonopus affinis) Centipedegrass (Eremochloa ophuiroides) Kikuyugrass (Pennisetum clandestinum) Zoysiagrass (Zoysia japonica)²	0.290 - 0.450	0.220 – .331	9.5 – 4.4

- 1. Use of this product on certain cultivars of Chewings Fescue, Fine Fescue, or Tall Fescue cultivars may result in undesirable injury.
- 2. F7119 Turf and IVM Herbicide application may cause temporary discoloration to exposed leaf surfaces on certain cultivars of zoysiagrass, bahiagrass, St. Augustinegrass, or rough bluegrass. Treated turfgrass will recover with new growth. Discolored leaf tissue will be removed with mowing. To reduce potential for discoloration, do not apply F7119 Turf and IVM 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.

*F7119 Turf and IVM Herbicide has demonstrated tolerance on both cool and warm season turfgrasses. However, not all varieties have been evaluated. Turfgrass managers desiring to treat newly released varieties should first apply F7119 Turf and IVM Herbicide to a small area prior to treatment of larger areas.

Application to reseeded, overseeded or sprigged areas:

Reseeding, overseeding or sprigging of treated areas within one (1) month after application of this product could inhibit the establishment of desirable turfgrasses. Overseeding of bermudagrass with perennial ryegrass at two (2) to four (4) weeks after an application can be done if slight injury to perennial ryegrass can be tolerated.

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:

This product may be applied to established sod. Allow sod to establish a good root system, a uniform stand and to fill in the exposed edges. It is recommended that sod be established for up to three (3) months before an application of F7119 Turf and IVM Herbicide. Do not apply this product within three (3) months of harvest.

Use Restrictions:

Do not apply to golf course putting greens or tees.

Do not graze or feed livestock forage cut from areas treated with F7119 Turf and IVM Herbicide.

Do not apply F7119 Turf and IVM Herbicide North of North Dakota State Highway 13 or Minnesota State Highway 210.

Do not apply directly to landscape ornamentals or ornamental beds.

Use Precautions:

Do not use on turfgrasses other than those listed on this label.

Do not apply to Turfgrasses under stress.

Do not apply with surfactants unless previous experience has demonstrated combinations with surfactant to be physically compatible and non-injurious to the grass type in question.

Temporary turfgrass discoloration has been observed when Primo has been either tank-mixed or applied within 7 days of a F7119 Turf and IVM Herbicide application. It is recommended that Primo applications be made 7 days prior to, or after F7119 Turf and IVM Herbicide application to reduce risk of turfgrass discoloration.

PREEMERGENCE CONTROL OF ANNUAL GRASSES, AND BROADLEAF WEEDS

Control of Summer Annual Weeds:

Apply F7119 Turf and IVM Herbicide at the application rate for the turf species being managed (4 to 14.4 fluid ounces/acre or 0.092 to 0.331 fl. oz./1,000 sq. ft.) prior to weed seed germination in early spring. Applications in early spring will control or suppress the following summer annuals:

Table 2. Summer Annual Broadleaf weeds, Grasses and Sedges

Table 2. Sullille Alliual bioaulea	ii weeus, Grasses and Seuges
Black medic	(Medicago lupulina)
Carpetweed	(Mullugo verticillata)
Common purslane	(Portulaca oleracea)
Pigweed, Redroot	(Amaranthus retroflexus)
Pigweed, Smooth	(Amaranthus hybridus)
Prostrate knotweed	(Polygonum aviculare)
Purslane, Common	(Portulace oleracea)
Pusley, Florida	(Richardia scabra)
Spurge	(Euphorbia spp.)
Prostrate spurge	(Euphorbia supina)
Spotted spurge	(Euphorbia maculata)
Barnyardgrass	(Echninochloa crusgalli)
Crabgrass, large	(Digitraria sanguinalis)
Crabgrass, smooth	(Digitaria ischaemum)
Foxtail, green	(Setaria viridis)
Foxtail, yellow	(Setaria glauca)
Goosegrass	(Eleusine indica)
Kyllinga, green	(Kyllinga brevifolia)
Kyllinga, false green	(Kyllinga gracillima)
Nutsedge, purple ¹	(Cyperus rotundus)
Nutsedge, yellow	(Cyperus esculentus)
Sedge, globe	(Cyperus globulosus)
Sedge, cylindric	(Cyperus retrorsus)
Sedge, Surinam	(Cyperus surinamensis)
Sedge, Texas	(Cyperus polystachyos)

Control of Winter Annual Weeds:

Apply F7119 Turf and IVM Herbicide at the application rate for the turf species being managed (4 to 14.4 fluid ounces/acre or 0.092 to 0.331 fl. oz./1,000 sq. ft.) in late summer or early fall to control or suppress the weeds listed in Table 3.

Table 3. Winter Annual Weeds

Table 3. Willer Allitual Week	15
Buttercups	(Ranunculus spp.)
Carolina geranium	(Geranium carolinianum)
Common chickweed	(Stellaria media)
Common groundsel	(Senecio vulgaris)
Corn Speedwell	(Veronica arvensis)
Hairy bittercress	(Cardamine hirsuta)
Henbit	(Lamium amplexicaule)
Johnnyjumpup violet	(Viola rafeinesquii)
Knawel	(Scleranthus annuus)
Large hop clover	(Trifolium campestre)
Mouseear chickweed	(Cerastium vulgatum)
Parsley-piert	(Alchemilla microcarpa)
Spurweed	(Soliva pterosperma)
Annual bluegrass	(Poa annua)
Annual ryegrass	(Lolium multiflorum)

To broaden the spectrum for pre-emergence control or suppression of annual grasses and/or broadleaf weeds, F7119 Turf and IVM Herbicide can be tank mixed with an EPA-registered annual grass herbicide. Applications in combination with prodiamine, pendimethalin, dithiopyr or oxadiazon will provide broad spectrum control of the weeds listed in Table 4. Read the label recommendations of the tank mix partner to determine grass species safety, use rate and application procedures. Follow all label restrictions, use directions and precautionary statements before using these tank mixtures. Read and follow the "TANK MIXTURES COMPATIBILITY" section of this label for instructions on how to determine the compatibility of tank mixtures.

POSTEMERGENCE CONTROL OF ANNUAL, BIENNIAL & PERENNIAL BROADLEAF WEEDS

F7119 Turf and IVM Herbicide will control or suppress the weeds listed in Table 4 when applied alone shortly after weeds have emerged. Apply F7119 Turf and IVM Herbicide at rates from 4 to 14.4 fl. oz/acre (0.092 to 0.331 fl. oz./1,000 sq. ft.). Do not exceed the application rate specified for the turfgrass species in Table 1. To broaden the weed spectrum and increase effectiveness for certain weeds listed in Table 4, F7119 Turf and IVM Herbicide may be tank mixed with other EPA registered postemergence herbicides. Control of emerged annual grass weeds may be improved by combining F7119 Turf and IVM Herbicide with Acclaim®, Dimension®, or Drive®. Read the label recommendations of the tank mix partner to determine turfgrass species safety, use rate and application procedures. Follow all label restrictions, use directions and precautionary statements before using these tank mixtures. Read and follow the "TANK MIXTURES COMPATIBILITY" section of this label for instructions on how to determine the compatibility of tank mixtures.

When used as directed F7119 Turf and IVM Herbicide will control or suppress the following weeds.

Table 4. Weeds Controlled or Suppressed by F7119 Turf and IVM Herbicide

BROADLEAVES	SCIENTIFIC NAMES
Bedstraw, catchweed	(Galium aparine)
Beggarweed, Florida	(Desmodium tortuosum)
Bittercress	(Cardamine spp.)
Black medic	(Medicago lupulina)
Buttercups	(Ranunculus spp.)
Carolina geranium	(Geranium carolinianum)
Carpetweed	(Mollugo verticillata)
Chickweed, common	(Stellaria media)
Chickweed, mouseear	(Cerastium vulgatum)
Cinquefoil	(Potentilla spp.)
Clover	(Trifolium spp.)
	(Ascalypha spp.)
Copperleaf	(Ascalypria spp.)
Cudweed	(Gnaphalium spp.)
Dandelion	(Taraxacum officinale)
Dock, Curly	(Rumex crispus)
Dollarweed	(Hydrocotyl umbellata)
Eclipta	(Eclipta prostrata)
Evening primrose	(Oenothera biennis)
Fiddleneck	(Amsinckia spp.)
Filaree	(Erodium spp.)
Galinsoga, hairy	(Galinsoga ciliate)
Goldenrod	(Solidago spp.)
Ground ivy	(Glechoma hederacea)
Groundsel, common	(Senecio vulgaris)
Henbit	(Lamium amplexicaule)
Knawel	(Scleranthus annuus)
Knotweed, prostrate	(Polygonum aviculare)
Kochia	(Kochia scoparia)
Lambsquarters, common	(Chenopodium album)
Lawn burweed (spurweed)	(Soliva pterosperma)
Lespedeza, common	(Lespedeza striata)
	(Lespeueza sinata)
Mallow, common	(Malva neglecta)
Parsley piert	(Alchemilla arvensis)
Pigweed, Redroot	(Amaranthus retroflexus)
Pigweed, Smooth	(Amaranthus hybridus)
Pigweed, Tumble	(Amaranthus albus)
Pineapple weed	(Matricaria matricarioides)
Plantain, buckhorn	(Plantago lanceolata)
Puncture weed	(Tribulus terrestris)
Purslane, common	(Portulaca oleracea)
Pusley, Florida	(Richardia scabra)
Redweed	(Melochia corchorifolia)
Rocket, London	(Sisymbrium irio)
Shepherd's purse	(Capsella bursa-pastoris)
Smartweed, Pennsylvania	(Polygonum pensylvanicum)
Sorrel, Red	(Rumex acetosella)
Speedwell	(Veronica spp.)
	(Euphorbia spp.)
Spurge, (annuals)	
Spurge, prostrate	(Euphorbia humistrata)
Spurge, spotted	(Euphorbia maculata)
Star of Bethlehem	(Ornithogalum umbellatum)
Velvetleaf	(Abutilon theophrasti)
Violet, wild	(Viola pratincola)
Violet, Johnny-jump-up	(Viola rafeinesquii)

Wild garlic	(Allium vineale)
Wild onion	(Allium canadense)
Woodsorrel, creeping	(Oxalis corniculata)
Woodsorrel, yellow	(Oxalis stricta)

POSTEMERGENCE CONTROL OF ANNUAL AND PERENNIAL SEDGES

F7119 Turf and IVM Herbicide will control or suppress sedges (Table 5) when applied at a rate of 4 to 14.4 fl oz/acre (0.092 to 0.331 fl. oz./1,000 sq. ft.). Apply the highest rate consistent with the rate needed for turfgrass safety in Table 1. Rates lower than 14. 4 fl oz/acre (0.331 fl. oz/ 1,000 sq. ft.) will generally control sedges for up to 60 days. A rate of 14.4 fl oz/acre (0.331 fl oz/1,000 sq. ft.) will provide approximately 75% control for up to 60 days. Yellow Nutsedge (*Cyperus esculentus*) is the most susceptible sedge species. Do not exceed dosage rates for extended control.

Good spray coverage is needed for optimum control of sedges. Temporary discoloration of some turfgrass species may result from use of surfactant. Do not apply with surfactants unless previous experience has demonstrated combinations with surfactants to be physically compatible and non-injurious to the grass type in question.

Table 5. Sedge species controlled or suppressed by F7119 Turf and IVM Herbicide

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Common Name	SCIENTIFIC NAME
Kyllinga, green	(Kyllinga brevifolia)
Kyllinga, false green	(Kyllinga gracillima)
Nutsedge, purple ¹	(Cyperus rotundus)
Nutsedge, yellow	(Cyperus esculentus)
Sedge, globe	(Cyperus globulosus)
Sedge, cylindric	(Cyperus retrorsus)
Sedge, Surinam	(Cyperus surinamensis)
Sedge, Texas	(Cyperus polystachyos)

¹.PURPLE NUTSEDGE; For optimum control of purple nutsedge, split applications may be required (Table 6). Apply 4-9.5 ounces per acre as an initial application followed by a second application when evidence of actively growing purple nutsedge is visible. Do not exceed the maximum rate per acre based on turfgrass variety listed in Table 1; Tolerant grasses.

Table 6. Split Application Rate Options

Grass Type	Option 1 (fluid oz/acre)	Option 2 (fluid oz /acre)
Cool Season Grasses excluding Bentgrass (see Table 1)	4 oz followed by 4 oz 35 DAIT	6 oz followed by 2 oz 35 DAIT
Warm Season Grasses (see Table 1)	9.5 oz followed by 4.9 oz 35 DAIT	7.2 oz followed by 7.2 oz 35 DAIT

DAIT = Days After Initial Treatment

POSTEMERGENCE CONTROL OR SUPPRESSION OF GRASSY WEEDS

F7119 Turf and IVM Herbicide will control or suppress specific annual grasses (Table 7) when applied at a rate of 4 to 14.4 fl oz/acre (0.092 to 0.331 fl. oz./1,000 sq. ft.). Apply the highest rate consistent with the rate needed for turfgrass tolerance in Table 1. Rates lower than 14.4 fl oz/acre (0.331 fl. oz/1,000 sq. ft.) will generally control grasses for up to 60 days. F7119 Turf and IVM Herbicide works best if applied when the annual grasses are small (pre-tiller stage) and actively growing. Do not exceed dosage rates for extended control.

Good spray coverage is needed for optimum control of grasses. Temporary discoloration of some turfgrass species may result from use of surfactant. Do not apply with surfactants unless previous experience has demonstrated combinations with surfactants to be physically compatible and non-injurious to the grass type in question.

Table 7. Grassy Weeds

Common Name	Scientific Name
Annual Bluegrass	Poa Annua
Crabgrass	Digitaria sp.
Dallisgrass*	Paspaium dilatatum
Goosegrass	Eleusine indica
Sandbur	Cenchrus sp.
Tropical Signalgrass*2	Urochloa subquadripara

*Suppression

² Apply F7119 Turf and IVM Herbicide at 7.0 to 8.0 oz/A to actively growing Tropical Signalgrass in spring or fall. Make two sequential applications at 14 day intervals with a tank mix of F7119 Turf and IVM Herbicide at 7.0 to 8.0 oz and Xonerate 4SC® herbicide at 6.0 to 14 fl oz/A. Tank mix combinations applied in the fall have demonstrated better control than spring applications. Additional tank mix partners for control of Tropical Signalgrass could include Tribute Total® (3.2 fl oz/A), Revolver® (26 fl oz/A), or Celsius® (3.7 fl oz/A) depending on additional postemergence weeds that may be present.

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.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call FMC: (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

If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional office for guidance.

Container Handling

Metal or Plastic Containers - 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 by other procedures approved by state and local authorities. Do not cut or weld metal containers.

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 re-circulate 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 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 terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

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