UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

April 2, 2019

Cristina Rodriguez
Product Registration Manager
FMC Corporation
2929 Walnut St.
Philadelphia, PA 19104

Subject: Label Amendment – Revising the rotation interval for corn
Product Name: F7583-3 Herbicide
EPA Registration Number: 279-3442
Application Date: September 27, 2017
Decision Number: 534451

Dear Ms. Rodriguez:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 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 FIFRA 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 with FIFRA section 6.

If you have any questions, please contact Shanta Adeeb by phone at 703-347-0502, or via email at adeeb.shanta@epa.gov.

Sincerely,

Mindy Ondish

Mindy Ondish
Product Manager 23
Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

Enclosure

SULFENTRAZONE	GROUP	14	HERBICIDE
S-METOLACHLOR	GROUP	15	HERBICIDE

F7583-3 Herbicide

ACCEPTED
04/02/2019
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 279-3442

EPA Reg. No. 279-3442 EPA Est. 279-

Active Ingredient: By Wt.

Sulfentrazone	7.55%
S-metolachlor	68.25%
Other Ingredients:	24.20%
TOTAL:	**100.0%**

Contains a total of 7.0 lb/gal which include 0.7 lb ai sulfentrazone and 6.3 lb ai *S*-metolachlor per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

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 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.

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, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further 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 FMC Corporation at 1-800-331-3148 for emergency medical treatment information.

Net Contents:

From
FMC Corporation
2929 Walnut Street
Philadelphia, PA 19104

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PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Caution

Harmful if swallowed. Avoid contact with skin, eyes or clothing. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear**:** Coveralls over short-sleeved shirt and short pants; chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, chemical-resistant footwear plus socks, and chemical resistant apron when cleaning equipment, mixing, or loading.

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
When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240)(d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS. Mixers and loaders supporting aerial applications are required to use closed systems. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)]. When using the closed system, the mixers' and loaders' PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations:
Users should:
• Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
• Remove clothing 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 fish and 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.

Mixing/Loading Instructions
Care must be taken when using this product to prevent back-siphoning into wells, spills or improper disposal of excess pesticide, spray mixtures, or rinsates.
Check-valves or antisiphoning devices must be used on all mixing and/or irrigation equipment.

F7583-3 Herbicide may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sinkholes, 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 pads 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 that will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

Groundwater advisory: The active ingredients in this product are known to leach through soil into groundwater under certain conditions as a result of agricultural 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.

Surface water advisory: This product can contaminate surface water through spray drift. Under some conditions, this product 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.

Physical/Chemical Hazards

Do not use or store near heat or open flame.

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.

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 24 hours.

Exception: if the product is soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Personal Protective Equipment (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 short-sleeve shirt and short pants, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, and chemical-resistant footwear plus socks.

STORAGE AND DISPOSAL

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

Pesticide Storage

Store product in original container only, away from other pesticides, fertilizer, food or feed. Do not use or store around the home.

Avoid storage below 32F. Product that has been frozen should be thawed and recirculated prior to its use. Store in a cool, dry place and avoid excess heat.

In Case of 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

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

Waste resulting from the use of this product must be disposed of at an approved waste disposal facility.

Container Handling

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. Then offer for recycling if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or other procedures allowed by state and local authorities.

(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 other procedures allowed by state and local authorities.

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. For final disposal, offer for recycling if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or other procedures allowed by state and local authorites.

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, loss of yield 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, to the extent consistent with applicable law, Buyer and User agree to hold FMC and Seller harmless for any claims relating to such factors. These risks can be exacerbated with the use of the same class of chemistry or mode of action in a 12 month period.

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.

To the extent consistent with applicable law, FMC or seller must 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.

WEED RESISTANCE MANAGEMENT

F7583-3 Herbicide, which contains the active ingredients sulfentrazone and *S*-metolachlor is a group 14 and 15 herbicide based on the mode of action classification system of the Weed Science Society of America.

Proactively implementing diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides is a best practice. A diversified weed management program may include the use of multiple herbicides with different sites of action and overlapping weed spectrum with or without tillage operations and/or other cultural practices. Research has demonstrated that using the labeled rate and directions for use is important to delay the selection for resistance.

The continued effectiveness of this product depends on the successful implementation of a weed resistance management program.

To aid in the prevention of developing weeds resistant to this product, users should:

- Scout fields before application to ensure herbicides and rates will be appropriate for the weed species and weed sizes present.
- Start with a clean field, using either a burndown herbicide application or tillage.
- Control weeds early when they are relatively small (less than 4 inches).
- Apply full rates of F7583-3 Herbicide for the most difficult to control weed in the field at the specified time (correct weed size) to minimize weed escapes.
- Scout fields after application to detect weed escapes or shifts in control of weed species.
- Control weed escapes before they reproduce by seed or proliferate vegetatively.
- Report any incidence of non-performance of this product against a particular weed to your local retailer or county extension agent.
- Contact your crop advisor or extension agent to find out if suspected resistant weeds to these MOAs have been found in your region. Do not assume that each listed weed is being controlled by multiple sites of action. Products with multiple active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredient in this product.
- If resistance is suspected, treat weed escapes with an herbicide having a site of action other than Group 14 and 15 and/or use nonchemical methods to remove escapes, as practical, with the goal of preventing further seed production.
- Suspected herbicide-resistant weeds may be identified by these indicators:
  - Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;

- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

Additionally, users should follow as many of the following herbicide resistance management practices as is practical:

· Use a broad spectrum soil-applied herbicide with other sites of action as a foundation in a weed control program.
· Utilize sequential applications of herbicides with alternative sites of action.
· Rotate the use of this product with non-Group 14 and 15 herbicides.
· Avoid making more than two applications of F7583-3 Herbicide and any other Group 14 and 15 herbicides within a single growing season unless mixed with an herbicide with a different site of action with an overlapping spectrum for the difficult-to-control weeds.
· Incorporate non-chemical weed control practices, such as mechanical cultivation, crop rotation, cover crops and weed-free crop seeds, as part of an integrated weed control program.
· Use good agronomic principles that enhance crop development and crop competitiveness.
· Thoroughly clean plant residues from equipment before leaving fields suspected to contain resistant weeds.
· Manage weeds in and around fields, during and after harvest to reduce weed seed production.

PRODUCT INFORMATION

F7583-3 Herbicide is a soil-applied herbicide for the control of susceptible broadleaf, grass and sedge weeds.
If adequate moisture (1/2" to 1") from rainfall or irrigation is not received within 7 to 10 days after the F7583-3 Herbicide treatment, a shallow incorporation (less than 2”), may be needed to obtain desired weed control. When activating moisture is not received a planned post-emergence application of a labeled herbicide will be needed for optimum weed control. If an activating rainfall (½” to 1”) is not received F7583-3 Herbicide will provide a reduced level of control of susceptible germinating weeds.
Observe all instructions, crop restrictions, mixing directions, application precautions, replanting directions, rotational crop guidelines and other label information of each product when tank mixing with F7583-3 Herbicide. Tank mixtures are permitted only in those states where the tank mix partner is registered.
F7583-3 Herbicide can be mixed with water, liquid fertilizer, or mixtures of water and liquid fertilizer and applied as a preplant or preemergence treatment to labeled crops. It is the pesticide user’s responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Under normal growing conditions, F7583-3 Herbicide exhibits excellent crop safety. Soil applications of F7583-3 Herbicide must be made before crop seed germination to prevent injury to the emerging crop seedlings. F7583-3 Herbicide applied after crop emergence will cause severe injury to the crop. Poor growing conditions, such as excessive soil moisture, cool temperatures, and soil compaction or the presence of various pathogens may impact seedling vigor. Under these conditions, the active ingredients in F7583-3 Herbicide can contribute to crop response. Refer to the specific directions of use for a particular crop/use pattern as set forth below for additional information.

IMPORTANT PRECAUTIONS

1. Ensure the seed furrow is closed and the seed covered on acres treated with F7583-3.
2. Soybean stunting may occur if excessive rainfall occurs after application but before soybeans emerge. Injury is more prevalent under poor drainage or compacted conditions or when soil is saturated for long periods of time. Soybeans outgrow stunting once favorable growing conditions return.
3. Do not apply if there are visible signs of cracking due to soybean emergence, or serious crop injury may result, such as but not limited to stand loss.
4. Seedling disease, nematodes, cold weather, deep planting (more than 2”), excessive moisture, high salt concentration, or drought may weaken soybean seedlings and increase the possibility of crop injury.
5. When tank mixing, follow the most restrictive use rates and precautions of the mixing partners.

Mechanism of Action

Following the application of F7583-3 Herbicide to soil, germinating seeds and seedlings take up F7583-3 Herbicide from the soil solution. The amount of F7583-3 Herbicide in soil solution available for weed uptake is determined primarily by soil type, soil organic matter and soil pH. Similar to other herbicides, F7583-3 Herbicide adsorbs to the clay and organic matter (OM) fractions of soils; effectively limiting the amount of active ingredient immediately available to control weeds.

Influence of soil type, organic matter and pH on F7583-3 Herbicide use rates and crop response

Coarse textured and high pH >7.2 soils (see Table 1) will exhibit increased weed control and crop response with F7583-3 Herbicide. It is important to know the soil type and soil pH levels of the field (or areas within a field) before application to determine the proper rate of F7583-3 Herbicide for the crop. Soil organic matter content and soil pH can vary widely and independently of soil type and requires an accurate analysis of representative soil samples or grids of soil samples within a specific field to determine its content.

It is important to note that irrigation with highly alkaline water (high pH) following a F7583-3 Herbicide soil application can also significantly increase the amount of F7583-3 Herbicide available in the soil solution. Irrigation with water having a pH greater than 7.2 could result in adverse crop response. This response will ultimately depend on initial F7583-3 Herbicide application rate, timing, amount and pH of irrigation water and sensitivity of the crop and it's growth stage when irrigated. The risk of adverse crop response will lessen with the advance in growth stage among most crops.

SOIL TEXTURE CLASSIFICATION CHART

Table 1.

COARSE	MEDIUM	FINE
Sand	Sandy clay loam	Silty clay loam
Loamy sand	Sandy clay	Silty clay
Sandy loam	Loam	Clay loam
	Silt loam	Clay
	Silt	

APPLICATION INFORMATION

Ground and Aerial Application

Utilize a sprayer equipped with the appropriate nozzles providing optimum spray distribution and coverage at the appropriate operating pressures. Utilize nozzles that produce minimal amounts of fine spray droplets to avoid spray drift. Apply a minimum of 10 gallons of finished spray solution per acre by ground or 5 gallons by air. The sprayer should be properly calibrated to deliver the appropriate volume of herbicide solution. Be aware that overlaps and slower ground speeds while starting, stopping or turning while spraying may result in excessive application and subsequent crop response.

Restrictions

Do not apply when wind speed favors drift beyond the area intended for treatment.

Do not apply under conditions which favor runoff or wind erosion of soil containing this product to non-target areas. To prevent off-site movement due to runoff or wind erosion:

1. Avoid treating powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.
2. Do not apply to impervious substrates, such as paved or highly compacted surfaces.
3. Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops, unless at least ½ inch of rainfall has occurred between application and the first irrigation.

Chemigation Application

Apply F7583-3 Herbicide in 0.25 to 1 inch of water. Use the lower water volume on coarse textured soil and higher volume on fine textured soils. Applying >1" of irrigation water may result in reduced weed control by

moving the product below the weed germination zone in the soil. Apply immediately after planting unless specified differently in the individual crop section. F7583-3 Herbicide may be applied through sprinkler irrigation systems including center pivot, lateral move, end tow, solid set, or hand move irrigation systems. Crop injury, lack of effectiveness or illegal residues on or in the crop ca n result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must also contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

F7583-3 Herbicide should be metered into the irrigation system continuously for the duration of the water application. F7583-3 Herbicide should be diluted in sufficient volume to insure accurate application over the area to be treated. Use the appropriate amount of water to carry the product to the soil surface. Continuous agitation is required to maintain product suspension in the solution tank. A jar test should be conducted to ensure that phase separation would not occur during dilution and application. Failure to achieve a uniform dilution throughout the time of application may result in undesirable residues or less than desirable weed control. Flush the lines at the completion of the application and then turn the water off promptly.

When using water from public water systems; DO NOT APPLY F7583-3 Herbicide THROUGH ANY IRRIGATION SYSTEM PHYSICALLY CONNECTED TO A PUBLIC WATER SYSTEM. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year. F7583-3 Herbicide may be applied through irrigation systems, which may be supplied by a public water system only if water from the water system is discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

It is important to note that irrigation with highly alkaline water (high pH) following a F7583-3 Herbicide soil application may significantly increase the amount of sulfentrazone available in soil solution. Irrigation with water having a pH greater than 7.2 could result in adverse crop response.

Restrictions

Do not apply by chemigation if there are visible signs of cracking due to soybean emergence, or serious crop injury may result, such as but not limited to stand loss.

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

Do not connect any irrigation system (including greenhouse systems) used for pesticide application to a public water system.

Application with Dry Fertilizers

F7583-3 Herbicide may be applied impregnated on dry fertilizers. When applied as directed with adequate soil coverage, F7583-3 Herbicide dry bulk fertilizer mixtures will provide satisfactory weed control.

Follow all F7583-3 Herbicide label directions regarding product use rates per acre, registered crops, incorporation, special instructions and precautions. Apply F7583-3 Herbicide/dry fertilizer mixtures with

ground equipment only. All individual state regulations relating to dry bulk fertilizer blending, registration, labeling, and application are the responsibility of the individual and/or company preparing, storing, transporting, selling or applying the F7583-3 Herbicide/dry fertilizer mixture.

Impregnation Directions

To impregnate F7583-3 Herbicide on dry bulk fertilizer, use a closed rotary-drum mixer or other commonly used dry bulk fertilizer blender equipped with suitable spray equipment.

Prepare a slurry of F7583-3 Herbicide in a clean container using clear water. Slowly add the F7583-3 Herbicide/water slurry to the impregnation spray tank and finish filling as needed with clear water. Spray nozzles must be placed to provide uniform coverage of F7583-3 Herbicide onto the fertilizer during mixing. Refer to the SPRAYER EQUIPMENT CLEAN-OUT section for directions for cleaning impregnation equipment, transport equipment, loading equipment and application equipment.

Apply the F7583-3 Herbicide dry bulk fertilizer with an accurately calibrated dry fertilizer spreader. The F7583-3 Herbicide dry bulk fertilizer mixture must be spread uniformly on the soil surface. Uneven spreading leaving untreated areas can cause poor weed control or overlapping areas with potential increased F7583-3 Herbicide use rates could result in possible crop response.

A minimum of 200 pounds of dry bulk fertilizer impregnated with the listed amount of F7583-3 Herbicide must be applied per acre to achieve adequate soil coverage for satisfactory weed control.

Refer to the appropriate crop section of the F7583-3 Herbicide label to determine the rate of F7583-3 Herbicide to be applied per acre. Use the following table to determine the amount of F7583-3 Herbicide to be impregnated on a ton (2000 pounds) of dry bulk fertilizer based on the rate of fertilizer that will be applied per acre.

For those rates not listed in Table 2, calculate the amount of F7583-3 Herbicide to be impregnated on a ton of dry bulk fertilizer using the following formula:

$$\frac{2000}{\text{Pounds dry fertilizer per acre}} \times \text{F7583-3 Herbicide use rate in fluid ounces per acre} = \text{fluid ounces of F7583-3 Herbicide to be applied per ton of fertilizer}$$

RATE CHART FOR IMPREGNATION OF DRY BULK FERTILIZERS WITH F7583-3 Herbicide

Table 2:

Dry fertilizer rate per acre	Fluid Ounces F7583-3 Herbicide per ton of fertilizer		
	F7583-3 Herbicide Use Rate Per Acre		
lb/acre	14 fl oz / acre	26 fl oz / acre	35 fl oz / acre
200	140	260	350
250	112	208	280
300	93	173	233
350	80	148	200
400	70	130	175
450	62	114	154

Restrictions

DO NOT impregnate F7583-3 Herbicide onto coated on ammonium nitrate, potassium nitrate, or sodium nitrate either alone or in blends with other fertilizers because these materials will not absorb the herbicide.

Do not use F7583-3 Herbicide alone or in mixtures on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

To avoid crop injury, do not use the herbicide/fertilizer mixture on crops where bedding occurs.

Application with Liquid Fertilizer

F7583-3 Herbicide may be applied using liquid fertilizer or fertilizer and water mixtures as the carrier. Adequate soil coverage is essential to achieve acceptable levels of weed control.
Herbicide mixing, solution stability and/or compatibility problems may occur when liquid fertilizers are used as a carrier. Compatibility tests must be conducted prior to mixing to insure tank mixture compatibility and stability. The use of compatibility agents may be beneficial to achieve and maintain a homogenous solution.

Mixing Instructions for Liquid Fertilizer Applications

Fill the clean spray tank to one half of the total volume with the fertilizer solution. Start the spray tank agitation system. Pre slurry F7583-3 herbicide with water prior to adding to the spray tank. Carefully rinse the empty container, adding the rinsate to the spray tank.
Complete filling the spray tank to the desired level. Sufficient and continuous spray tank agitation is required at all times to maintain a homogenous spray solution. The spray system must be designed such that there is sufficient flow capacity to uniformly apply the spray mixture and maintain adequate tank agitation. Some systems may require separate pumps to simultaneously supply the spray system and the spray tank agitation system. Insure the F7583-3 Herbicide slurry is thoroughly mixed before application.
For tank mixtures with other herbicide(s), a compatibility test must be conducted to insure product compatibility before mixing. Read and follow all the directions, precautions and restrictions of the tank mixture products prior to mixing.
Apply the F7583-3 Herbicide spray mixture immediately after mixing. It is not recommended to store the sprayer overnight or for any extended period of time with the F7583-3 Herbicide spray mixture remaining in the tank. Thoroughly re-agitate spray mixture if product is left sitting in the tank for extended period of time.
If F7583-3 Herbicide is mixed and loaded in nurse tanks, thorough agitation of spray solution is required prior to off-loading and application.
Follow all F7583-3 Herbicide label directions regarding product use rates per acre, registered crops, application instructions, incorporation directions, special instructions and all precautions.
All individual state regulations relating to liquid fertilizer blending, storage, transportation, registration, labeling, and application are the responsibility of the individual and/or company preparing, selling or applying the F7583-3 Herbicide and fertilizer mixture.

SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.
The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses, or to applications using dry formulations:

- The distance of the outermost nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees.
- When states have more stringent regulations, they must be observed.

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage for pesticide performance.
Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly or under unfavorable environmental conditions. (See information on Wind, Temperature and Humidity, and Temperature Inversions in subsequent sections).
Volume – Nozzles with higher rated flow generally produce larger droplets.
Pressure - When higher flow rates are needed, use higher flow rate nozzles rather than increasing spray pressure. Avoid spray pressures >40 psi unless specified by the manufacturer of drift reducing spray tips and nozzles. Do not exceed the nozzle manufacturer's recommended pressures. Lower pressure produces larger droplets in many types of nozzles.

Number of Nozzles – Use the minimum number of nozzles that provide uniform coverage.
Nozzle Type - Use nozzles to provide uniform coverage that are designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low drift nozzles for both ground and aerial applications.
Boom Length - For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.
Application Height - Aerial applications should not be made at a height greater than 10 feet above the top of the target plant canopy unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.
Swath Adjustment - When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)
Wind – Drift potential is lowest between wind speeds of 3-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they may potentially affect spray drift.
Temperature and Humidity – When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.
Temperature Inversions – Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small-suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the low speed and variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common during conditions of limited cloud cover and little to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified 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.
Sensitive Areas – The pesticide should only be applied when the wind is blowing away from sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops). To assure that spray will not adversely affect adjacent sensitive non-target plants, apply F7583-3 Herbicide by aircraft at a minimum upwind distance of 400 ft. from sensitive plants. Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

Off-Target Movement of F7583-3
Drift of dilute spray mixtures containing F7583-3 must be prevented. Observation of the environmental conditions, correct application equipment design, calibration and application practices will reduce the risk of off-target spray drift. F7583-3 can cause damage by drift on to sensitive crops and other plants. This symptomology may manifest initially as discreet, localized spots where contacted by F7583-3 drift mixtures. Depending on sensitivity of the plants, the concentration of the spray solution and droplets size these spots or lesions may or may not coalesce. These effects will usually not have lasting effects on plant growth, but can reduce the value of affected fruit or foliage where grade or quality is associated with appearance. In drift instances with sensitive crops, defoliation of affected foliage could result.

MAXIMUM ALLOWABLE F7583-3 Herbicide

USE PER ACRE PER 12 MONTH CROPPING YEAR PERIOD
The total allowed usage includes all applications made to the field per twelve-month cropping year. This includes all pre plant and after plant pre emerge treatments.

RESTRICTION: Do not exceed maximum allowed use rate of sulfentrazone or *S*-metolachlor on each crop.
Refer to the crop section of this label for specific product use directions.

Table 3

Name of the crop	F7583-3 Herbicide fl. oz./A	Total Lb ai/A	Lb ai sulfentrazone/A	Lb ai *S*-metolachlor/A
Dry Shelled Beans & Peas	38.7	2.12	0.21	1.90
Horseradish	25.0	1.36	0.13	1.23
Soybeans	38.7	2.12	0.21	1.90
Sunflowers	38.7	2.12	0.21	1.90

CROP ROTATIONAL RESTRICTIONS

The following Table 4 shows the minimum interval in months from the time of the last F7583-3 Herbicide application until F7583-3 Herbicide treated soil can be replanted to the crops listed. Cover crops for soil health and erosion control can be planted at any time after an application of F7583-3, but do not use cover crops for food or feed. Consult your local University extension service for cover crop sensitivity to F7583-3. When F7583-3 Herbicide is tank mixed with another herbicide, refer to the partner label for re-cropping instructions, following the directions that are most restrictive.

Some crops have rotational intervals greater than 12 months after a F7583-3 Herbicide application due to potential crop injury. A representative bioassay of the field shall be completed with the rotational crop to accurately determine the planned crop's sensitivity to F7583-3 Herbicide.

RESTRICTION: Do not rotate to food or feed crops other than those listed on the label.

CROP ROTATIONAL RESTRICTIONS

Table 4

Crop	**Interval (Months)**
Alfalfa*	12
Barley	4 ½
Cabbage (transplant only)	2
Cereal Grains (Oats, Pearl Millet, Proso Millet, Teosinte, Wild Rice)	12
Buckwheat	12
Corn, Field	4
Corn, Pop	10
Corn, Sweet	12
Cotton	18 or 12**
Cowpea (succulent)	8
Dry Shelled Peas	Anytime
Dry Shelled Beans	4
Horseradish	Anytime
Lima Beans-Tennessee Only	4
Peanuts	4
Potatoes	4
Rice	10
Rye	4½
Safflower	Anytime
Sorghum	10
Soybeans	Anytime
Succulent peas	8
Sugar Beets	36 or 24***
Sunflowers	Anytime
Triticale	4½
Tobacco	10

Tomato	4
Wheat	4½

*To avoid injury to rotational alfalfa, (1) Do not apply more than 1.9 lb ai *S*-metolachlor per acre in the previous crop, and (2) Do not make lay-by or other postemergent applications of products containing *S*-metolachlor in the previous crop.
** Cotton may be planted after 12 months where F7583-3 Herbicide was applied at rates 36 fl oz/acre or less and meets the following conditions:

- Medium and fine soils
- Ph <7.2
- Rainfall or irrigation must exceed 15" after application of F7583-3 to rotate to cotton

***Sugar beets can be planted after 24 months with a successful bioassay.

For all other crops not listed, the rotation interval is a minimum of 12 months with a representative bioassay to determine crop safety before planting.

REPLANTING INSTRUCTIONS

If initial planting of labeled crops fails to produce a stand, only crops labeled for F7583-3 Herbicide or the tank mix partner; whichever is most restrictive, may be planted based on the amount of product initially applied. When replanting use minimum soil tillage to preserve the herbicide barrier and achieve maximum weed control.

RESTRICTIONS:
Do not retreat field with F7583-3 Herbicide or other herbicide containing sulfentrazone and *S*-metolachlor.
Do not plant treated fields to any crop at intervals that are inconsistent with the Rotational Crop Guidelines on this label.

BAND TREATMENT APPLICATIONS

For band treatments, apply the broadcast equivalent rate and volume per acre. To determine these:

Band Width Inches / Row Width Inches	X	Broadcast Rate Per Acre	=	Band Rate
Band Width Inches / Row Width Inches	X	Broadcast Volume Per Acre	=	Band Volume

MIXING AND LOADING INSTRUCTIONS

F7583-3 Herbicide may be applied alone, or in tank mixtures with other labeled herbicides for the control of additional weed species. Mixtures with some other pesticides have not been tested. Conduct appropriate compatibility tests prior to tank mixing with other pesticides. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
It is important that spray equipment is clean and free of existing pesticide residues before preparing F7583-3 Herbicide spray mixtures. For all tanks containing spray solution follow the spray tank clean out procedures specified on the label of the product or products previously applied.
For best results fill spray tank with one half of the volume of clean water needed for the field to be treated. Start agitation system. Slowly add the F7583-3 Herbicide to the spray tank. Carefully rinse the empty container, adding the rinsate to the spray tank. Complete filling the spray tank to the desired level.

Continuous spray tank agitation is required at all times to maintain a uniform spray solution. Make sure F7583-3 Herbicide is thoroughly mixed before application.
Use the F7583-3 Herbicide spray mixture immediately after mixing. Avoid storing the sprayer overnight or for any extended period of time with the F7583-3 Herbicide spray mixture remaining in the tank.
If F7583-3 Herbicide is tank mixed with other labeled herbicides,It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

SPRAYER EQUIPMENT CLEAN-OUT

As soon as possible after spraying F7583-3 Herbicide and before using sprayer equipment for any other applications, the sprayer must be thoroughly cleaned to avoid potential crop affects using the following procedure. Residues left in mixing equipment, spray tanks, hoses, spray booms and nozzles can cause crop effects if they are not properly cleaned. In addition, users must take appropriate steps to ensure proper equipment clean-out for any other products mixed with F7583-3 Herbicide as required on the other product labels. More complete cleaning can be achieved if the spray system is cleaned immediately following the application.
1. Drain sprayer tank, hoses, spray boom and spray nozzles. Use a high-pressure detergent wash to remove physical sediment and residues from the inside of the sprayer tank and thoroughly rinse. Then, thoroughly flush sprayer hoses, spray boom and spray nozzles with a clean water rinse. Remove and clean spray tips and all filters and screens (tank, spray hose and spray tips) separately in the ammonia solution of Step 2.
2. Next, prepare a sprayer cleaning solution by adding three gallons of ammonia (containing at least 3% active) per 100 gallons of clean water. Prepare sufficient cleaning solution to allow the operation of the spray system for a minimum of 15 minutes to thoroughly flush hoses, spray boom and spray nozzles.
3. Convenient and thorough cleaning of the sprayer can be achieved if the ammonia solution or fresh water is left in the spray tank, hoses, spray booms and spray nozzles overnight or during storage.
4. Before using the sprayer, completely drain the sprayer system. Rinse the tank with clean water and flush through the hoses, spray boom, and spray nozzles with clean water. Remove and clean spray tips and all filters and screens (tank, spray hose and spray tip) separately in an ammonia solution.
5. Properly dispose of all cleaning solution and rinsate in accordance with Federal, State, and local regulations and guidelines.
Do not apply sprayer cleaning solutions or rinsate to sensitive crops.
Do not store the sprayer overnight or for any extended period of time with F7583-3 solution remaining in the tank, spray lines, spray boom plumbing, spray nozzles or strainers
If the sprayer has been stored or idle, purge the spray boom and nozzles with clean water before beginning any application.
Should small quantities of F7583-3 Herbicide remain in inadequately cleaned mixing, loading and/or spray equipment, they may be released during subsequent applications potentially causing effects to certain crops and other vegetation. FMC accepts no liability for any effects due to inadequately cleaned equipment.
Do not drain or flush equipment on or near desirable trees or plants.
Do not contaminate any body of water including irrigation water that may be used on other crops.

SOYBEANS

Table 8:

F7583-3 Herbicide Use Rate Fall, Spring Early Preplant, Preemergence, and Preplant Incorporated Applications			
Broadcast Rate	**Fl oz F7583-3 Herbicide per acre**		
	Soil Texture		
% Organic Matter	**Coarse**	**Medium**	**Fine**
<1.5	19-25	25-32	25-32

1.5-3	25	25-32	25-32
>3	25	25-32	32-38.7
Refer to the previous information on soil types under the COARSE, MEDIUM, and FINE categories For soils with pH >7.2 use the lowest rate for that specific soil texture and organic matter.			

Weeds Controlled

The following is a general list of weeds for which F7583-3 has shown control or suppression. The level of control will vary per use rate, cropping system, environmental conditions, moisture levels and soil type. F7583 may not control all of the weeds listed under all crop conditions.

Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	*Amaranthus, spinosus*
Amaranth, spleen	*Amaranthus dubius*
Barnyardgrass	*Echinochloa crus-galli (L.) Beauv.*
Broadleaf signalgrass	*Urochloa platyphylla (Nash) R. D. Webster*
Copperleaf, hophornbeam	*Acalypha ostryifolia Riddell*
Crabgrass spp.	*Digitaria spp.*
Crowfootgrass	*Dactyloctenium aegyptium (L.) Willd.*
Cupgrass, Prairie	*Eriochloa contracta Hitchc.*
Cupgrass, Southwestern	*Eriochloa acuminata (J. Presl) Kunth*
Fall Panicum	*Panicum dichotomiflorum Michx.*
Florida Pusley	*Richardia scabra L.*
Foxtail, Giant	*Setaria faberi Herrm.*
Foxtail, Green	*Setaria viridis (L.) Beauv.*
Foxtail, Robust	*Setaria viridis var. robusta*
Foxtail, Yellow	*Setaria glauca (L.) Beauv.*
Foxtail, bristly	*Setaria verticillata (L.) Beauv.*
Goosegrass	*Eleusine indica (L.) Gaertn.*
Groundcherry, cutleaf	*Physalis angulata L.*
Hairy galinsoga	*Galinsoga ciliata (Raf.) Blake*
Kochia (ALS and Triazine Resistant)	*Kochia scoparia (L.) Schrad.*
Lambsquarters, common	*Chenopodium album*
Morningglory, entireleaf	*Ipomea hederacea integriusc*
Morningglory, ivyleaf	*Ipomea hederacea hederacea*
Morningglory, Palmleaf	*Ipomea Wrightii*
Morningglory, pitted	*Ipomoea lacunosa L.*
Morningglory, purple	*Ipomea turbinate*
Morningglory, red	*Ipomea coccinea*
Morningglory, scarlet	*Ipomea hederifolia*
Morningglory, small flower	*Jacquemontia tamnifolia (L.) Griseb.*
Morningglory, tall	*Ipomea, purpurea*
Nightshade, black	*Solanum nigrum*
Nightshade, eastern black	*Solanum americanum*
Pigweed, red root	*Amaranthus retroflexus*
Pigweed, smooth	*Amaranthus hybridus*
Pigweed, spiny	*Amaranthus*
Sida, prickly	*Sida spinosa L.*
Smartweed, Pennsylvania (seedling)	*Polygonum pensylvanicum L.*
Star of Bethlehem	*Ornithogalum umbellatum L.*

Texas panicum	*Panicum texanum L*
Thistle, Russian	*Salsola tragus L.*
Tropical Spiderwort	*Commelina benghalensis L.*
Waterhemp, common	*Amaranthus rudis*
Waterhemp, tall	*Amaranthus tuberculatos*
Witch grass	*Panicum capillare L.*
SEDGES (suppression only)	
Nutsedge, purple	*Cyperus rotundus*
Nutsedge, yellow	*Cyperus esculentus*
Sedge, annual	*Cares spp.*

Fall Applications
F7583-3 Herbicide may be applied as a fall treatment to the stubble of harvested crops for preemergence control of labeled weeds the following spring in no-till and conservation tillage production systems. Fall applications of F7583-3 Herbicide must be made in weed control programs that include, as needed, spring application of preplant, preemergence or postemergence herbicides for the following crop season. Applications to ridge till production systems must be made after the formation of ridges or bedded. Apply when the sustained soil temperature at a 4-inch depth is less than 55 degrees F and falling.
If weeds are emerged at the time of application, utilize a tank mixture with a suitable burndown herbicide at labeled rates. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture

For Fall Application:
- Apply after September 30 in ND, SD, MN, WI and north of Route 30 in IA.
- Apply after October 15 north of Route 91 in NE and south of Route 30 in IA.
- Apply after October 31 north of Route 136 in IL.
- Do not make fall applications south of Interstate 70.

Early Preplant, Preplant Incorporated, and Preemergence Applications (Spring Applications)
Use on medium to fine soils with minimum tillage or no-tillage systems in CO, CT, DE, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, MO, MT, ND, NE, NH, NY, OH, PA, RI, SD, TN, VA, VT, WI, WV, and WY. F7583-3 Herbicide can be applied Early Preplant, Preplant Incorporated or Preemergence up to 3 days after planting but prior to emergence. For preplant incorporated applications, incorporation must be uniform and no deeper than 2 inches. Improper soil incorporation may result in erratic weed control and/or crop injury. F7583-3 Herbicide applied near or after crop emergence may cause severe injury to the crop. F7583-3 Herbicide can be applied alone or in combination with other soybean herbicides, including those containing sulfentrazone, as long as the sulfentrazone active ingredient rate does not exceed 0.375 lb a.i./A per season. Do not apply more than 2.387 lb a.i./A *S*-metolachlor per season. F7583-3 Herbicide may be followed by labeled postemergence soybean herbicides for increased control of grass and broadleaf weeds.It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. When using F7583-3 Herbicide in no-till or minimum till cropping systems, tank mix with an appropriate burndown herbicide for improved control of existing weeds. Apply on coarse soils no more than 2 weeks prior to planting.

Precautions
- When applying F7583-3 Herbicide with other registered herbicides, refer to specific label information on precautions, restrictions, instructions, limitations, application methods and timings, and weeds controlled.

Restrictions
- Do not apply more than 38.7 fl oz per acre of F7583-3 Herbicide per crop year.
- Do not apply more than 0.375 lb ai sulfentrazone total per acre per crop year.
- Do not graze or feed treated soybean forage, hay or straw to livestock for 30 days after treatment.

- Do not use on soils classified as sand, which have less than 1% organic matter.
- Do not apply to frozen soils or existing snow cover to prevent F7583-3 Herbicide runoff from rain or snowmelt that may occur following application.
- Do not apply after crop seed germination.

SUNFLOWERS

Table 9:

F7583-3 Herbicide Use Rate (Sunflowers) Preemergence and Preplant Incorporated Applications			
Broadcast Rate	**Fl oz F7583-3 Herbicide per acre**		
	Soil Texture		
% Organic Matter	**Coarse**	**Medium**	**Fine**
<1.5	19-21	19-25	21-30
1.5-3.0	19-25	21-32	25-32
>3	21-25	25-32	32-38.7
Refer to the previous information on soil types under the COARSE, MEDIUM, and FINE categories For soils with pH >7.2 use the **lowest rate** for that specific soil texture and organic matter.			

Weeds Controlled
When applied according to directions in sunflower, F7583-3 Herbicide will provide control of :

Amaranth, Palmer	Thistle, Russian
Kochia (ALS and Triazine Resistant)	Waterhemp, common
Lambsquarters, common	Waterhemp, tall
Morningglory, ivyleaf	Barnyardgrass
Morningglory, tall	Fall Panicum
Nightshade, Eastern black	Foxtail, giant
Nightshade, black	Foxtail, green
Pigweed, red root	Foxtail, yellow
Pigweed, smooth	Witch grass

Note: Partial control will occur under dry conditions, under heavy pest pressure or at low use rates under 26 fl oz. Under these conditions plan to use a labeled post-emergence herbicide for improved control.

Preemergence (Spring Applications)
F7583-3 Herbicide can be applied preemergence up to 3 days after planting as a soil surface application if seedlings have not broken the soil surface and if the seed furrow is completely closed and completely covered with soil. Adequate moisture (1/2" to 1") is required for herbicide activation from rainfall or irrigation. If adequate moisture is not received within 7 to 10 days after the F7583-3 Herbicide treatment, a shallow incorporation may (less than 2 inches) be needed to obtain desired weed control. When activating moisture is not received a planned post-emergence application of a labeled herbicide will be needed for optimum weed control. If an activating rainfall (½" to 1.0") is not received F7583-3 Herbicide will provide a reduced and inconsistent level of control of susceptible germinating weeds. If dry conditions persist, weed control may be reduced. If applying on coarse soils with less than 1.5% organic matter, wait a minimum of 7 days after application before planting.

If weeds are emerged at the time of F7583-3 Herbicide application, use a labeled burndown herbicide such as Aim herbicide, glyphosate or paraquat at the full-labeled rate in combination with F7583-3 Herbicide as needed.

Spring Preplant Incorporated (PPI)
When planting into soil treated preplant with F7583-3 Herbicide minimize soil disturbance to maintain the herbicide barrier on the soil surface to achieve maximum weed control. F7583-3 Herbicide can be applied as a Preplant Incorporated treatment in the spring up to 2 weeks prior to planting in reduced and conventional tillage sunflowers. F7583-3 Herbicide should be shallowly incorporated in the soil no deeper than 2 inches. Incorporating F7583-3 Herbicide deeper than 2 inches can result in inconsistent weed control. Use the appropriate rate from Table 9 above for the soil texture, soil organic matter, and soil pH level.

Precautions

- Plant sunflowers 1.5" deep and completely cover with soil.
- Adverse crop response may occur on coarse textured soils with low organic matter (less than 1.5%) and pH of 7.2 or higher, or on highly eroded soils, hilltops, or in areas of calcareous outcroppings. F7583-3 Herbicide use rates should be reduced to 14 fl oz in those areas or not applied in these areas at all. Inadequate seed furrow closure or shallow planting (less than 1.5 inch) may result in undesirable crop response and this product should not be applied. Poor growing conditions such as excessive moisture, low temperatures, soil compaction and diseases may also cause undesirable crop response.

These Crop Specific Use directions are based upon the interactive effects of F7583-3 Herbicide and the primary soil and environmental factors, which affect its activity on various weed species and tolerance among crops. The user is required to observe the instructions and guidance previously presented under Product Application Instructions, F7583-3 Herbicide Product Use Rates, Rotational Crop Guidelines, Replanting Instructions, Weed Controlled and any other section of this label pertinent to the anticipated crop use. It is important to note that not all varieties or cultivars of a given crop species have been evaluated under treatment with F7583-3 Herbicide. Consult seed companies and university or extension weed management personnel for additional information on specific local varieties or cultivars and any other pertinent information on F7583-3 Herbicide under specific local conditions.

Restrictions

- Do not apply more than 38.7 fl oz of F7583-3 Herbicide per acre per crop year.
- Do not apply herbicides containing sulfentrazone to sunflowers if F7583-3 Herbicide has been previously applied within the same twelve month period.
- Do not apply to frozen soils or existing snow cover to prevent F7583-3 Herbicide runoff from rain or snowmelt that may occur following application.
- Do not allow livestock to graze or feed in treated area.
- Do not apply after crop seed germination.
- Do not use on soils classified as sand, which have less than 1% organic matter.

DRY SHELLED BEANS AND PEAS

Dried cultivars of bean (*Lupinus*); bean (*Phaseolus*)(includes field bean, black bean, kidney bean, lima bean (dry), navy bean, pink bean, pinto bean, tepary bean), small red bean, great northern bean; bean (*Vigna*) (includes adzuki bean, blackeyed pea, catjang, cowpea, crowder pea moth bean, lentil, mung bean, rice bean, southern pea, urd bean); broad bean (dry); guar; lab lab bean; pea (*Pisum*) (includes field pea and chickpea) and pigeon pea.

Table 10:

F7583-3 Herbicide Use Rate (Dry Shelled Peas and Beans) Fall or Spring Early Preplant, Preemergence, and Preplant Incorporated Applications

Broadcast Rate	Fl Oz F7583-3 Herbicide per acre		
	Soil Texture		
% Organic Matter	Coarse	Medium	Fine
<1.5	Do not use	19-26	19-26
1.5-3.0	19-26	21-32	26 - 32
>3	21-26	26-32	32-38.7
Refer to the previous information on soil types under the COARSE, MEDIUM, and FINE categories For soils with pH >7.2 use the **lowest rate** for that specific soil texture and organic matter.			

Weeds Controlled

The following is a general list of weeds for which F7583-3 has shown control or suppression. The level of control will vary per use rate, cropping system, environmental conditions, moisture levels and soil type. F7583 may not control all of the weeds listed under all crop conditions. For crops where lower use rates are needed for crop tolerance refer to their specific weed list.

Amaranth, Palmer	Thistle, Russian
Kochia (ALS and Triazine Resistant)	Waterhemp, common
Lambsquarters, common	Waterhemp, tall
Morningglory, ivyleaf	Barnyardgrass
Morningglory, tall	Fall Panicum
Nightshade, Eastern black	Foxtail, giant
Nightshade, black	Foxtail, green
Pigweed, red root	Foxtail, yellow
Pigweed, smooth	Witch grass

Note: Partial control will occur under dry conditions, under heavy pest pressure or at low use rates under 26 fl oz. Under these conditions plan to use a labeled post-emergence herbicide for improved control.

FALL APPLICATION

F7583-3 Herbicide may be applied in the fall following crop harvest or in existing fallow fields to control or suppress weeds the following season. F7583-3 Herbicide should be applied to the harvested crop stubble or soil surface without incorporation. Moisture in the form of rain or snow will move and activate the product. Do not mechanically incorporate in the fall or spring after application because this activity may destroy the herbicide barrier and weed escapes can occur. Do not apply to frozen soils to prevent F7583-3 Herbicide runoff from rain or snow that may occur following application. F7583-3 Herbicide may be tank mixed with other labeled herbicides to control emerged weeds. When activating moisture is not received a planned post-emergence application of a labeled herbicide will be needed for optimum weed control. If an activating rainfall (½" to 1.0") is not received F7583-3 Herbicide will provide a reduced and inconsistent level of control of susceptible germinating weeds. If dry conditions persist, weed control may be reduced. Fall application of F7583-3 Herbicide may require a follow up grass herbicide treatment as grass escapes may occur.

F7583-3 should be applied when the sustained soil temperature is 55°F and falling at a soil depth of 4 inches. Applications to ridge till production systems must be made after the formation of ridges or bedded.

For Fall Application:

- Apply after September 30 in ND, SD, MN and WI and north of Route 30 in IA.
- Apply after October 15 north of Route 91 in NE and south of Route 30 in IA.
- Apply after October 31 north of Route 136 in IL.

F7583-3 Herbicide can be tank mixed with other labeled herbicides. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Early Preplant and Preemergence (Spring Applications)
F7583-3 Herbicide can be applied early preplant or preemergence up to 3 days after planting if seedlings have not broken the soil surface and if the seed furrow is completely closed and completely covered with soil. Adequate moisture (1/2" to 1") is required for herbicide activation from rainfall. If adequate moisture is not received within 7 to 10 days after the F7583-3 Herbicide treatment, a shallow incorporation (less than 2 inches) may be needed to obtain desired weed control. When activating moisture is not received a planned post-emergence application of a labeled herbicide will be needed for optimum weed control. If an activating rainfall (½" to 1.0") is not received F7583-3 Herbicide will provide a reduced and inconsistent level of control of susceptible germinating weeds. If dry conditions persist, weed control may be reduced.
If weeds are emerged at the time of F7583-3 Herbicide application, use a burndown herbicide such as AIM herbicide, glyphosate or paraquat at the full-labeled rate in combination with F7583-3 Herbicide as needed.

Preplant Incorporated (PPI)
F7583-3 Herbicide can be applied as a Preplant Incorporated treatment in the spring prior to planting in reduced and conventional tillage dry beans and peas. F7583-3 Herbicide should be shallowly incorporated in the soil no deeper than 2 inches. Incorporating F7583-3 Herbicide deeper than 2 inches can result in inconsistent weed control. Minimize furrow and ridge formation in the tillage operations. Use the appropriate rate from Table 11 above for the soil texture, soil organic matter, and soil pH level.

Precautions
- Under extended periods of dry weather, adequate weed control may not be achieved. Adequate moisture (½" to 1") is required for herbicide activation from rainfall. If adequate moisture is not received within 7 to 10 days after the F7583-3 Herbicide treatment, a shallow incorporation may be needed to obtain desired weed control. When activating moisture is not received a planned post-emergence application of a labeled herbicide will be needed for optimum weed control. If an activating rainfall (½" to 1") is not received F7583-3 Herbicide will provide a reduced and inconsistent level of control of susceptible germinating weeds. If dry conditions persist, weed control may be reduced.
- Adverse crop response may occur on coarse textured soils with low organic matter (less than 1.5%) and pH of 7.2 or higher, or on highly eroded soils, hilltops, or in areas of calcareous outcroppings. F7583-3 Herbicide use rates should be reduced to 13 fl oz in those areas or not applied in these areas at all. Inadequate seed furrow closure or shallow planting (less than 1.5 inch) may result in undesirable crop response and this product should not be applied. Poor growing conditions such as excessive moisture, low temperatures, soil compaction and diseases may also cause undesirable crop response.

These Crop Specific Use directions are based upon the interactive effects of F7583-3 Herbicide and the primary soil and environmental factors, which affect its activity on various weed species and tolerance among crops. The user is required to observe the instructions and guidance previously presented under Product Application Instructions, F7583-3 Herbicide Product Use Rates, Rotational Crop Guidelines, Replanting Instructions, Weed Controlled, Crop Liability Disclaimer and any other section of this label pertinent to the anticipated crop use. It is important to note that not all varieties or cultivars of a given crop species have been evaluated under treatment with F7583-3 Herbicide. Consult seed companies and university or extension weed management personnel for additional information on specific local varieties or cultivars and any other pertinent information on F7583-3 Herbicide under specific local conditions.

Restrictions
- Do not apply more than 38.7 fl oz of F7583-3 Herbicide per acre per crop year.
- Do not apply additional sulfentrazone containing products to dry field beans and peas if F7583-3 Herbicide has been previously applied within the same twelve month period.
- Do not apply after crop emerges, or if the seedling is close to the soil surface.
- Do not incorporate to depths greater than 2 inches.

- Do not apply to frozen soils or to existing snow cover to prevent F7583-3 Herbicide runoff from rain or snow melt that may occur following application.
- Do not use on soils classified as sand, which have less than 1% organic matter.
- Do not use for forage within 60 days after an application of F7583-3 Herbicide.
- Do not cut for hay within 120 days after an application of F7583-3 Herbicide.

HORSERADISH

Apply a single application of F7583-3 at a broadcast rate of 19-25 fluid ounces per acre to the soil surface after planting but before weed or crop emergence. Use listed lower rates on soils relatively coarse-textured and listed higher rates on fine textured soils.

Apply in at least 10 gallons per acre finished spray solution by ground.

Following the application of F7583-3 herbicide to soil, germinating seeds and seedlings take up F7583-3 from the soil solution. The amount of F7583-3 herbicide in soil solution available for weed uptake is determined primarily by soil type, soil organic matter and soil pH. Similar to other herbicides, F7583-3 herbicide adsorbs to the clay and organic matter (OM) fractions of soils; effectively limiting the amount of active ingredient immediately available to control weeds. Adequate moisture is required for herbicide activation (1/2'' to 1'' of rainfall or irrigation). If an activating rainfall (1/2'' to 1'') is not received F7583-3 herbicide will provide a reduced level of control of susceptible germinating weeds.

Weeds Controlled:
The following is a general list of weeds for which F7583-3 has shown control or suppression. The level of control will vary per use rate, cropping system, environmental conditions, moisture levels and soil type. F7583 may not control all of the weeds listed under all crop conditions. For crops where lower use rates are needed for crop tolerance refer to their specific weed list.

Barnyardgrass	morningglory, smallflower
fall panicum	nightshade, black
foxtail, giant	nightshade, eastern black
foxtail, green	palmer amaranth
foxtail, yellow	Pennsylvania smartweed
morningglory, entireleaf	pigweed, red root
morningglory, ivyleaf	pigweed, smooth
morningglory, pitted	waterhemp, common
	waterhemp, tall

RESTRICTIONS:
Do not exceed 25 fluid ounces per acre per cropping season.
Do not use on soils classified as sand, which have less than 1% organic matter.
Do not apply directly on the crop after the crop emerges or if the seedling sprouts are close to the soil surface.
Harvest horseradish at normal timing.

LABEL TRACKING INFORMATION

Label Code: D-4150 022819