

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## WASHINGTON DC 20460

# OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION 

Ms Shannon Yanocha
FMC Corporation
1735 Market Street
Philadelphia, PA 19103
SEP 282012

Subject Label Amendment to add new uses of Petition No 1F7838 (citrus fruit crop group, low growing berry crop group, tree nut crop group including pistachio), IR4 Petition No 1E7890 (rhubarb, turnip, sunflower crop subgroup B, spring wheat, succulent cowpea, lima bean), and IR-4 Petition No 2E8020 (edamame) to the herbicide product labels listed below containing the active ingredient, Sulfentrazone EPA Reg Nos 279-3189, 279-3149, 279-3220, and 279-3370 Decision Numbers 445542, 445543, 445544, 445548, 450876, 450882, 450885, 450886, 464038, 464040, 464041, 464042

## Dear Ms Yanocha

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable provided the following label revisions are made

1 For all new uses being added to the dry flowable formulation (279-3189), add the following chemigation prohibition to the restriction section "Do not apply through irrigation equipment "

2 For all of the IR-4 minor uses being added to the dry flowable formulation (279-3189), add the following aerial prohibition to the restriction section "Do not apply by arr"

3 For all new uses being added to the liquid formulations (279-3370 and 279-3220), add the following prohibition to the restriction section "Do not apply using a mechanically pressurized handgun "

The Agency notes that FMC agrees to conduct a 28 -day inhalation study in rats to establish a NOAEL for occupational inhalation exposure and risk assessment, within 18 months of the date of this letter A study protocol will be submitted to EPA for review before conducting this study Depending on the results of this inhalation study, the label mitigation for occupational uses may be revisited Until this study provides the Agency with a NOAEL for occupational inhalation exposure, the label revisions listed above must be incorporated in the final printed labels for these products

Subject Label Amendment to add new uses of Petition No 1F7838 (citrus fruit crop group low growing berry crop group tree nut crop group including pistachio) IR 4 Petition No 1E7890 (rhubarb turnip sunflower crop subgroup B spring wheat succulent cowpea lima bean) and IR 4 Petition No 2E8020 (edamame) to the herbicide product labels listed below containing the active ingredient Sulfentrazone
EPA Reg Nos 279318927931492793220 and 2793370
Decision Numbers 445542445543445544445548450876450882450885450886464038464040464041464042

One copy of labeling for these products, stamped "Accepted with Comments," is enclosed for your records Products released for shipment after 18 months from the date on this notice or the next printing of the label, whichever occurs first, must bear the new revised label Amended labeling will supersede all previously accepted ones

Per 40 CR 156 10(6), submit one copy of your final printed labeling before you release the product for shipment If you have questions or concerns regarding this letter, please contact Beth Benbow at (703) 347-8072 or email at benbow bethany@epa gov


# F6285 4F CAL Herbicide 

## Group 14 Herbicide

| Active Ingredient | By Wt |
| :--- | ---: |
| Sulfentrazone | $396 \%$ |
| Other Ingredients | $\underline{604 \%}$ |
|  | $1000 \%$ |

Contains 4 pounds of active ingredient per gallon

## KEEP OUT OF REACH OF CHILDREN CAUTION

In EPA Letter Dated,

SEP 282012 Under the Federal Ir nticide,
 as amender in trogon registered under Fit $k=4$


Si usted no etiende sta etiqueta bisque a alguien para que se la explique a ousted en detalle (If you do not understand this label find someone to explain it to you in detail

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 1520 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 1520 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 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

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
f on Skin or Clothing
Take off contaminated clothing Rinse skin immediately with plenty of water for 1520 minutes Call a poison control center or doctor treatment advice
in Eyes
motes Remove contact lenses if present after the first 5 If Swallowed

Call a poison con unconscious person

## 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 18003313148 for emergency medical treatment information

## From



FMC Corporation
1735 Market Street
Philadelphia PA 19103

## ATTENTION

Although this label may appear similar to the label on a product you may have used there may be important label differences Users must read understand and strictly follow all label directions precautions and restrictions It is the user s responsibility to be sure the product is approved for sale or use on the intended crop and for use in the specific geographic area
It is the user s responsibility to be aware of and to follow all State or local precautions or restrictions not appearing on this product label
Prior to purchase or use of this product read the Terms
of Sale or Use and Limitation of Warranty and Liability on page 2 of this label If the terms and conditions are unacceptable return the product immediately in the original and unopened container

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## PRECAUTIONARY STATEMENTS

## Hazards to Humans and Domestic Anımals

## 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 chemical resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride 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 manufacturers 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

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User Safety Recommendations
Users should
    Remove clothing/PPE immediately If pesticide gets inside Then wash thoroughly and put on clean clothing
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## 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

Groundwater advisory 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 contamınation

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

Surface water advisory Sulfentrazone can contaminate surface water through spray drift Under some conditions sulfentrazone may also have a high potential for runoff into surface water (primanly via dissolution in runoff water) for several to many months post application These include poorly draining or wet solls 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 dranage 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
For use only in the State of Californa
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
Do not apply more than the allowed amount of F6285 4F CAL per acre per twelve month period as stated in Table 3 The twelve month period is considered to begin upon the initial F6285 4F CAL 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 notrication 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 $\mathbf{1 2}$ hours
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 soll 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

## STORAGE AND DISPOSAL

Do not contaminate water food or feed by storage or disposal Do not use or store around the home

## 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

In case of spill avoid contact isolate area and keep out animals and unprotected persons Confine spills Call CHEMTREC (Transportation and spills) (800) 4249300

## To Confine Spill

To confine spill If Iquid 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 may be disposed of at an approved waste disposal facility

## Container Handling

Nonrefillable container Do not reuse or refill this contaner Triple rinse contaner (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 contaner 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 applicatıon equipment or a mix tank and drain for 10 seconds after the flow begins to drip Fill the contaner $1 / 4$ 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 Dran for 10 seconds after the flow begins to drip Repeat this procedure two more times Triple rinse (or equivalent) Then offer for recycling if available or reconditioning or puncture and dispose of in a sanutary landfill or incineration or if allowed by state and local authorities by burning if burned stay out of smoke
Returnable/Refillable Containers Refill this container with pesticide only Do not reuse this contaner 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 contaner 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 tumes

## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

Notice Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product if the terms are not acceptable return the product at once unopened and the purchase price will be refunded
The Directions for Use of this product must be followed carefully It is impossible to eliminate all risks inherently associated with the use of this product Crop injury ineffectiveness or other unintended consequences may result because of such factors as manner of use or application weather or crop conditions beyond the control or FMC or Seller All such risks, shall be assumed by Buyer and User and to the extent consistent with applicable law Buyer and User agree to hold FMC and Seller harmless for any claims relating to such factors
Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the directions under normal conditions of use TO THE EXTENT CONSISTENT WITH APPLICABLE LAW FMC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION PURCHASE OR USE OF THIS PRODUCT Any warranties express or implied having been made are inapplicable if this product has been used contrary to label instructions or under abnormal conditions or under conditions not reasonably foreseeable to (or beyond the control of seller or FMC and to the extent consistent with applicable law buyer assumes the risk of any such use
To the extent consistent with applicable law FMC or seller shali 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

## RESISTANCE MANAGEMENT

Some weeds are known to develop resistance to herbicides that have been used repeatedly While the development of herbicide resistance is well understood it is not easily predicted Therefore herbicides should be used in conjunction with the resistance management strategies in the area Consult the local or State agricultural advisors for detals if herbicide resistance should develop in the area this product used alone may not continue to provide sufficient levels of weed control If the reduced levels of control can not be attributed to improper application techniques improper use rates improper application timing unfavorable weather conditions or abnormally high weed pressure a resistant strain of weeds may have developed

To reduce the potential for weed resistance use this product in a rotation program with other classes of chemistry and modes of action Always apply this product at the listed rates and in accordance with the use directions Do not use less than listed label rates alone or in tank mixtures Do not use reduced rates of the tank mix partner For optimum performance scout fields carefully and begin applications when weeds are smaller rather than larger If resistance is suspected contact the local or State agricultural advisors

## PRODUCT INFORMATION

F6285 4F CAL is a selective soil applied herbicide for the control of susceptible broadleaf grass and sedge weeds F62854F CAL is formulated as a 4 pounds per gallon flowable containing the active ingredient sulfentrazone If adequate moisture (1/2 to 1 ) from rainfall or irrigation is not received within 7 to 10 days after the F6285 4F CAL treatment a shallow incorporation may be needed to obtain desired weed control When activating moisture is received after dry conditions F62854F CAL will provide a reduced level of control of susceptible germinating weeds Soil applications of F62854F CAL must be made before crop seed germination to prevent injury to the emerging crop seedings When applications after planting are delayed injury may occur if seeds are germinating or if they are located near the soll surface

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 F6285 4F CAL
Proper handling instructions F6285 4F CAL 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 maintaned to contain any product spills or equipment leaks contaner or equipment rinse or washwater and rainwater that may fall on the pad Surface water shall not be allowed to ether flow over or from the pad which means the pad must be self contaned The pad shall be sloped to facilitate material removal An unroofed pad shall be of sufficient capacity to contan at a minimum $110 \%$ of the capacity of the largest pesticide contaner 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 contanment 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

## APPLICATION INSTRUCTIONS

F6285 4F CAL may be applied to soll as a preplant incorporated treatment or as a pre emergence (prior to weed and/or crop emergence) surface application Additional application methods include post plant treatments over the top and layby in various crops Application methods are defined in the following Crop Use Directions sections
Preplant incorporated treatments require a uniform surface application followed by incorporation Do not incorporate to a depth greater than 2 inches which may result in poor weed control Care must be taken not to create overlaps in treated zones due to soil movement which will result in excessive F6285 4F CAL rates that could result in adverse crop response

All soil applications and the residual activity of post plant applications of F6285 4F CAL require adequate moisture for herbicidal activation The ultimate amount of moisture whether supplied by rainfall or irrigation is dependent on several factors These factors include but are not limited to existing soil moisture at application soil type organic matter and tilth In crop situations dependent on rainfall F6285 4F CAL can await activating moisture for extended periods ( 10 to 14 days or longer) depending on the soil parameters described above Once activated F62854F CAL will provide activity on existıng weeds The level of activity will depend on the weed species and their size at time of activation Where irrigation is not available and rainfall has not provided activation particularly for surface applications of F62854F CAL a shallow incorporation is recommended for destruction of any germinating weeds and to incorporate F6285 4F CAL Herbicide incorporation will initrate the process of activation with existing soil moisture in circumstances where prolonged periods without rainfall and/or irrigation is not possible alternative or additional weed management practices (cultivation or post applied herbicides) may be required
Extreme care must be exercised and the Crop Specific Use Directions followed exactly in crops allowing post plant applications of F6285 4F CAL Over the top and lay by applications will provide contact and residual weed control depending on species The addition of surfactants may increase contact weed control performance but may also increase the risk of adverse crop response as well

## CALIFORNIA ONL.Y SPECIFIC RESTRICTIONS ON APPLICATIONS OF F6285 4F CAL HERBICIDE

Artificial Recharge Basins Do not use below the high water line inside artificial recharge basins (a surface facilty such as an infiltration pond or basin or spreading ground that is specifically designed and managed to increase the infiltration of introduced surface water supplies into a ground water basin) unless this product is applied six months or more before the basin is used to recharge ground water
Unlined Canals and Ditches Do not use below the high water line inside unlined canals and ditches unless either (a) the pesticide user can document that the percolation rate of the canal or ditch is equal to or less than 02 inches per hour ( 0002 gallons per minute per square foot) or (b) the pesticide is applied six months before water is run in the canal or ditch

Rights of Way Do not use on engineered rights of way in areas established by the California Department of Pesticide Regulation as leaching or runoff ground water protection areas unless either (a) any runoff from the treated right of way shall pass through a noncrop fully vegetated area adjacent and equal in area to the treated area or spread out onto an adjacent unenclosed fallow field that is at least 300 feet long and that will not be irrigated for six months following application with the exception of the addition of adequate moisture that is required for herbicidal activation following application as described under Product Application Instructions with full consideration of any plantback restrictions or (b) the property operator complies with any permit issued pursuant to the storm water provisions of the federal Clean Water Act pertaining to the treated area
Runoff Ground Water Protection Areas Do not use in areas identified by the California Department of Pesticide Regulation as a runoff ground water protection areas unless one of the following management practices can be met
(a) Soil disturbance Within seven days before this product is applied the soil to be treated shall be disturbed by using a disc harrow rotary tiller or other mechanical method This subsection does not apply to the area to be treated that is immediately adjacent to the crop row and that does not exceed 33 percent of the distance between crop rows or in citrus to the band from the tree row to the dripline or
(b) Incorporation of the pesticide Within 48 hours after the day this product is applied the pesticide shall be incorporated on at least 90 percent of the area treated using a disc harrow rotary tiller or other mechanical method or by sprinkler or low flow irrigation including chemigation where allowed by the label using a minimum of $1 / 4$ inch of irrigation water and a maximum of one inch as described under Product Application Instructions at application rates that do not cause surface water runoff from the treated property or to wells on the treated property or
(c) Band treatment This product is applied as a band treatment immediately adjacent to the crop row so that not more than 33 percent of the distance between rows is treated or in citrus not more than the area from the tree row to the dripline is treated or
(d) Timing of application This product is applied between April 1 and July 31 or
(e) Retention of runoff on field For six months following the application the field shall be designed by berms levees or nondraining circulation systems to retain all irrigation runoff and all precipitation on and drainage through the field The retention area on the field shall not have a percolation rate of more than 02 inches per hour ( 5 inches per 24 hours) or
(f) Retention of runoff in a holding area off the field For six months following the application all runoff shall be channeled to a holding area off the application site under the control of the property operator that is designed to retain all irrigation runoff and all precipitation on and drainage through the treated field and all other areas draining into that holding area The holding area shall not have a percolation rate of more than 02 inches per hour ( 5 inches per 24 hours) or
(g) Runoff onto a fallow field For six months following application runoff shall be managed so that it runs off onto an adjacent unenclosed fallow field at least 300 feet long that is not irrigated for six months after application with the exception of the addition of adequate moisture that is required for herbicidal activation following application as described under Product Application Instructions with full consideration of any plant back restrictions
Leaching Ground Water Protection Areas Do not use in areas designated by the California Department of Pesticide Regulation as leaching ground water protection areas unless either (a) the user does not apply any irrigation water for six months following application of this product or (b) the user applies this product to the planting bed or the berm above the level of irrigation water in the furrow or basin and the water level shall remain at or below that level for six months following application of the pesticide with the exception of the addition of adequate moisture that is required for herbicidal activation following application as described under Product Application instructions or (c) irrigation is managed so that the ratio of the amount of irrigation water applied divided by the net irrigation requirement is 125 or less for six months following application of this product
Consult with your County Agricultural Commissioner to determine whether the application will be within an area designated by the California Department of Pesticide Regulation as either a Runoff Ground Water Protection Area or a Leaching Ground Water Protection Area Details regarding the locations of these Areas are also available via the internet at ww coir ca gov/docs/emon/ grndwtr/gwp regs him

## F6285 4F CAL HERBICDE PRODUCT USE RATES

The following directions for the selection of F6285 4F CAL application rates are critical to achieve maximum performance and to insure maximum crop safety The user is required to read and follow the specific F6285 4F CAL use directions and restrictions for each crop as defined in subsequent sections of this label The user is cautioned that some crops respond differently to F6285 4F CAL This response is governed by the F62854F CAL application rate various soil factors and inherent crop sensitivity The Crop Specific Use Directions have been designed to minimize the risk of adverse crop response while maintaining optimum weed control

## Mode of Action

Sulfentrazone the active ingredient in F6285 4F CAL is a potent inhibitor of the enzyme Protoporpyrinogen Oxidase IX (PPO IX) required for the formation of chlorophyll Inhibition of PPO IX enzyme results in the liberation of singlet oxygen ( $O$ ) that in turn disrupts cellular membranes and causes cellular leakage The ultimate manifestation of the process is cellular death leading to plant death The selective herbicidal activity of sulfentrazone is based on its greater affinity for the PPO IX enzyme in weed species versus crop plants

## Mechanism of Action

Following the application of F6285 4F CAL to soil germinating seeds and seedlings take up sulfentrazone from the soil solution The amount of sulfentrazone in soil solution and available for weed uptake is determined primarily by soil type organic matter and soil pH Sulfentrazone adsorbs to the clay and organic matter (OM) fractions of soils effectively limiting the amount of active ingredient immediately available to control weeds Soils typically increase in clay content through the series from coarse to fine as noted in the following Soil Classification Chart Table 1

## SOIL 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 |  |

## Influence of Soil type organic matter and pH on F6285 4F CAL Use Rates and Crop Response

Soil organic matter content can vary widely and independently of soil type and requires an accurate analysis of representative soil samples to determine its content
Soil pH also exerts a dramatic affect on sulfentrazone availability in the soil solution As soil pH increases sulfentrazone availability increases Accurate soil pH information will require an accurate analysis of representative soil samples

The total amount of sulfentrazone available in solution in any given soil is determined by the interaction of soil type (clay content) \% organic matter and pH The application timing (relative to the emergence of the crop and weeds) and amount of rainfall and/or irrigation received will ultimately determine in conjunction with the soil parameters and pH the amount of sulfentrazone in soil solution It is important to note that F6285 4F CAL can await activating moisture However diminished weed control may result due to the successive increase in weed growth versus timing of activation
It is important to note that irrigation with highly alkaline water (high pH) following a F6285 4F CAL soil application can also significantly increase the amount of sulfentrazone available in the soil solution Irrigation with water having a pH greater than 75 could result in adverse crop response This response will ultimately depend on initial F62854F CAL application rate timing amount and pH of irrigation water and sensitivity of the crop and its growth stage when irrigated The risk of adverse crop response will lessen with the advance in growth stage among most crops
The following Crop Specific Use Directions have been designed with specific F6285 4F CAL recommendations for each crop based on the soil type soil organic matter and soil pH interactions described above The user is cautioned that crop tolerance and weed control performance are based on strict adherence to these recommendations

## APPLICATION INFORMATION

## Ground Application

Utilize a boom and nozzle sprayer equipped with the appropriate nozzles spray tips and screens and adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures Utilize nozzles that produce minimal amounts of fine spray droplets to avoid spray drift or inadequate foliar and/or soil coverage Apply a minimum of 10 gallons of finished spray per acre by ground Be aware that overlaps and slower ground speeds while starting stopping or turning while spraying may result in excessive application and subsequent crop response

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

## Aerial Application

Use nozzle types and arrangements that will provide optimum coverage while producing a minimal amount of fine droplets Apply sufficient spray volume to achieve adequate coverage Apply a minimum of 5 gallons of finished spray per acre
Do not apply when wind speed favors diff t beyond the area intended for treatment

## Chemıgatıon Application

F6285 4F CAL may be applied through sprinkler irrigation systems including center pivot lateral move end tow solid set or hand move irrigation systems 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 Crop injury lack of effectiveness or illegal residues on or in the crop can 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
It is important to note that irrigation with highly alkaline water (high pH) following a 662854 F CAL soil application can also significantly increase the amount of sulfentrazone available in soil solution Irrigation with water having a pH greater than 75 could result in adverse crop response This response will ultimately depend on initial F62854F CAL application rate application timing amount and pH of the irrigation water and the sensitivity of the crop and the growth stage when irrigated The risk of adverse crop response will lessen with advancing growth stages of most crops
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 irngation 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 (eg diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock
F6285 4F CAL should be metered into the irrigation system continuously for the duration of the water application F62854F CAL 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 F6285 4F CAL 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 dally at least 60 days of the year F6285 4F CAL may be appled 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

## Application with Dry Fertilizers

F6285 4F CAL may be applied impregnated on dry fertilizers When appled as directed with adequate soll coverage F6285 4F CAL dry bulk fertilizer mixtures will provide satisfactory weed control
Follow all F6285 4F CAL label directions regarding product use rates per acre registered crops incorporation special instructions and precautions
Apply F6285 4F CAL /dry fertilizer mixtures with ground equipment only
All individual state regulations relating to dry buik fertilizer blending registration labeling and application are the responsibility of the individual and/or company preparing storing transporting selling or applying the F62854F CAL/dry fertilizer mixture

## Impregnation Directions

To impregnate F6285 4F CAL 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 F6285 4F CAL in a clean contanner using clear water Slowly add the F62854F CAL/water slurry to the impregnation spray tank and finish filling as needed wth clear water Spray nozzles must be placed to provide uniform coverage of F6285 4F CAL 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 F6285 4F CAL dry bulk fertilizer with an accurately calibrated dry fertilizer spreader The F62854F CAL dry bulk fertilizer mixture must be spread uniformly on the soll surface Uneven spreading leaving untreated areas can cause poor weed control or overlapping areas with potential increased F6285 4F CAL use rates could result in possible crop response
A minimum of 200 pounds of dry bulk fertilizer impregnated with the listed amount of F62854F CAL must be applied per acre to achieve adequate soll coverage for satisfactory weed control
DO NOT impregnate F6285 4F CAL onto coated ammonium nitrate or limestone because these materials will not absorb the herbicide
Refer to the appropriate crop section of the F6285 4F CAL label to determine the rate of F6285 4F CAL to be applied per acre Use the followng table to determine the amount of F6285 4F CAL 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 the following table calculate the amount of F6285 4F CAL to be impregnated on a ton of dry bulk fertilizer using the following formula
$2000 \quad$ F6285 4F CAL use rate ounces of F6285 4F CAL

| $x$ <br> Pounds dry fertlizer <br> per acrein fluid ounces <br> per acre | $=$to be applied per <br> ton of fertilizer |
| :--- | :--- |

RATE CHART FOR IMPREGNATION OF DRY BULK FERTILIZERS WITH F6285 4F CAL
Table 2

|  | Ounces F6285 4F CAL per ton of fertilizer |  |  |
| :---: | :---: | :---: | :---: |
|  | F6285 4F CAL Use Rate Per Acre |  |  |
| Dry Fertilizer <br> Rate <br> (lb/acre) | 8 O Fluid <br> Ounces <br> per Acre | 101 Fluid <br> Ounces <br> per Acre | 120 Fluid <br> Ounces <br> per Acre |
| 200 | 80 | 101 | 120 |
| 250 | 64 | 808 | 96 |
| 300 | 533 | 673 | 80 |
| 350 | 457 | 577 | 686 |
| 400 | 40 | 505 | 60 |
| 450 | 356 | 449 | 533 |

## Application with Liquid Fertilizer

F6285 4F CAL may be applied using liquid fertilizer solutions as the carrier The fertilzer solutions may either be concentrate formulations as blended or diluted with water When applied as directed with adequate soll coverage F6285 4F CAL applied with
liquid fertilizer mixtures will provide satisfactory weed control However adequate soil coverage is essential to achieve acceptable levels of weed control

Herbicide mixing solution stability and/or compatibility problems can 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 Prepare a slurry of F6285 4F CAL in a clean container with clean water using equal volumes of F6285 4F CAL and clean water Slowly add the F6285 4F CAL/water slurry to the spray tank Carefully rinse the slurry container adding the rinsate to the spray tank Better mixing of the F6285 4F CAL/water slurry may be achieved if the slurry is added using induction systems on the sprayer fill plumbing system
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 F62854F CAL slurry is thoroughly mixed before application
For tank mixtures with other herbicides) 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 F6285 4F CAL spray mixture immediately after mixing Do not store the sprayer overnight or for any extended period of time with the F6285 4F CAL spray mixture remaining in the tank

Do not premix F62854F CAL spray solutions in nurse tanks
Follow all F6285 4F CAL 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 F62854F CAL and fertilizer mixture

## SPRAY DRIFT REDUCTION ADVISORY

To avoid drift do not apply when wind speeds exceed 10 mph Do not exceed spray pressures of 40 pss unless specified by the manufacturer of drift reducing spray tips and nozzles

## Spray Drift Management

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER
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 movement from aerial applications These requirements do not apply to forestry applications public health uses or to applications of dry materials

1 The distance of the outermost nozzles on the boom must not exceed /a the length of the wingspan or rotor
2 Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees
3 Observe the regulations of the State where applications are made
4 Applicators must observe and abide by the requirements of the Aerial Drift Reduction Advisory

## 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)

## Controlling Spray Droplet Size

Volume - Use high flow rate nozzles to apply the greatest practical spray 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
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 Orientation - For aerial application the recommended practice is to onent nozzles so that the spray is released parallel to the airstream This orientation usually produces larger droplets as compared to other nozzle orientations Significant nozzle deflection from horizontal will reduce droplet size and increase drift potential
Nozzle Type Use a nozzle type that is 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 Solid stream nozzles oriented straight back usually produce the largest droplets and the lowest drift potential in aerial applications
Boom Length - For some aerial 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 aerial applications are made with a crosswind the swath will be displaced downwind Therefore on the upwind and downwind edges of the field the applicator must compensate for this displacement by the path of the aircraft upwind Swath adjustment or offset distance should increase when conditions favor increased drift potential (higher winds smaller droplets etc)
Wind - Drift potential is lowest between wind speeds of 310 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 often begin to form as the sun sets and may often continue into the morning The presence of a temperature inversion may be indicated by ground fog However if fog is not present the movement of smoke from a ground source or an aircraft smoke generator can also identify inversions Smoke that remains in layers and moves laterally in a concentrated cloud (under low speed 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)

## Off Target Movement of F6285 4F CAL

Drift of dilute spray mixtures containing F6285 4F CAL must be prevented Observation of the preceding environmental conditions correct application equipment design calibration and application practices will significantly diminish the risk of off target spray drift F6285 4F CAL can cause significant symptomology by drift on to sensitive crops and other plants This symptomology may manifest initially as discreet localized spots where contacted by F6285 4F CAL drift mixtures Depending on concentration of the spray solution and droplets size (effectively determining the dosage of sulfentrazone) and also depending on the inherent sensitivity of the plants involved these spots or lesions may or may not coalesce. These effects will usually not have lasting effects on plant growth but will likely reduce the value of affected fruit or foliage where grade or quality is associated with appearance in severe drift instances with particularly sensitive crops defoliation of affected foliage could result Failure to follow these guidelines and environmental prohibitions that then result in off target movement or drift of F62854F CAL on to unintended crops or plants irrespective of severity constitutes misapplication of this product FMC accepts no responsibility or liability for potential crop effects that may result from such misapplication of F62854F CAL
MAXIMUM ALLOWABLE F6285 4F CAL USE PER ACRE PER 12 MONTH PERIOD*
Refer to the crop section of this label for specific product use directions Table 3

| Crop | Ounces F6285 4F <br> CAL Per Acre | Pound Active <br> Sulfentrazone <br> Per Acre |
| :--- | :---: | :---: |
| Row Crops | 120 | 0375 |
| Corn | 80 | 025 |
| Fallow | 96 | 030 |
| Peanuts | 80 | 025 |
| Potatoes | 120 | 0375 |
| Soybeans | 120 | 0375 |
| Sugarcane | 80 | 025 |
| Sunflower subgroup <br> 20B | 120 | 0375 |
| Tobacco | 120 | 0375 |
| Vegetable Crops | 120 | 0375 |
| Asparagus | 64 | 0220 |
| Brassica head and <br> stem (Broccoli and <br> Cabbage) | 80 | 025 |
| Brassica leafy <br> greens | 120 | 0375 |
| Dry Beans \& Peas |  |  |
| Fruiting Vegetables <br> and Okra(except <br> cucurbits) |  |  |


| Horseradish | 80 | 025 |
| :--- | :---: | :---: |
| Melons | 80 | 025 |
| Rhubarb | 80 | 025 |
| Strawberry | 120 | 0375 |
| Succulent Peas | 60 | 01875 |
| Turnips | 80 | 025 |
| OIl Crops | 120 | 0375 |
| Flax | 120 | 0375 |
| Mint | 120 | 0375 |
| Turf | 120 | 0375 |
| Sod Production | 120 | 0375 |
| Permanent Crops | 120 | 0375 |
| Berries | 120 | 0375 |
| Citrus |  |  |
| Grapes |  |  |
| Tree nuts |  |  |

*The total allowed usage per twelve month period includes all applications made to the field per twelve month interval This includes fallow treatments burndown treatments planting time and all in season treatments The twelve month period is considered to begin upon the initial F62854F CAL application

## CROP ROTATIONAL RESTRICTIONS (140)

The followng Table 4 shows the minimum interval in months from the time of the last F6285 4F CAL application untal F6285 4F CAL treated soll can be replanted to the crops listed When F6285 4F CAL is tank mixed with another herbicide refer to the partner label for recropping instructions following the directions that are most restrictive
For all other crops not listed below the rotational interval is a minimum of 12 months Some crops have rotational intervals greater than 12 months after a F6285 4F CAL application due to potential crop injury A representative broassay of the field shall be completed with the rotational crop to accurately determine the planned crop s sensitivity to sulfentrazone

CROP ROTATIONAL RESTRICTIONS**
Table 4

| Crop | Interval (Months) |
| :--- | :--- |
| Alfalfa | 12 |
| Asparagus | Anytıme |
| Barley | 4 |
| Berries | Anytıme |
| Brassica head and stem (Broccolı <br> and Cabbage) | Anytıme |
| Brassica leafy greens | Anytıme |
| Canola | 24 |
| Cereal Graıns (Buckwheat Oats <br> Pearl Millet Proso Millet Teosinte <br> Wild Rice) | 12 |
| Citrus |  |
| Corn Field | Anytıme |
| Corn Pop | 10 |
| Corn Sweet | 18 |
| Cotton | 18 |
| Dry Shell Peas and Beans | 18 |
| Flax | Anytıme |
| Fruting Vegetables (except cucurbits) | Anytıme |
| Grapes | Anytıme |
| Horseradısh | Anytıme |
| Melons | Anytıme |
| Mint | Anytıme |
| Peanuts | Anytıme |
| Potatoes | Anytıme |
| Rhubarb | Anytıme |
| Rice | 10 |
| Rye | 4 |
| Sorghum | 10 |
| Soybeans | Anytıme |
| Strawberry | 36 |
| Succulent peas |  |
| Sugar Beets | Anytıme |


| Sugarcane | Anytime |
| :--- | :--- |
| Sunflower subgroup 20B | Anytıme |
| Sweet Potatoes | 12 |
| Tritıcale | 4 |
| Tobacco | Anytime |
| Tree nuts | Anytime |
| Turf | Anytime |
| Turnips | Anytime |
| Wheat | 4 |

Sorghum - 18 month rotation for rates above 80 oz/acre
*For all other crops not listed the rotation interval is a minimum of 12 months

## BAND TREATMENT APPLICATIONS

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

| Band Width Inches | $\times$ | Broadcast <br> Rate Per Acre | $=$ | Band Rate |
| :---: | :---: | :---: | :---: | :---: |
| Row Width Inches |  |  |  |  |
|  |  | $=$ | Band Volume |  |
| Band Width Inches | $\times$ | Broadcast <br> Volume Per Acre | $=$ |  |

## MIXING AND LOADING INSTRUCTIONS

F6285 4F CAL may be applied alone or in tank mixtures with other 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 Follow all precautions and restrictions on the tank mix partner label
It is important that spray equipment is clean and free of existing pesticide residues before preparing F6285 4F CAL spray mixtures 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 Prepare a slurry of F6285 4F CAL in a clean container using clean water Slowly add the F6285 4F CAL/water slurry to the spray tank Carefully rinse the slurry 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 F6285 4F CAL is thoroughly mixed before application or before adding another product to the spray tank
Use the F6285 4F CAL spray mixture immediately after mixing Do not store the sprayer overnight or for any extended period of time with the F6285 4F CAL spray mixture remaining in the tank
Do not premix F6285 4F CAL spray solutions in nurse tanks
If F62854F CAL is tank mixed with other herbicides all additional directions restrictions and precautions for the tank mixture herbicides must be followed

## SPRAYER EQUIPMENT CLEAN-OUT

As soon as possible after spraying F6285 4F CAL 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 F6285 4F CAL 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 F6285 4F CAL spray 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 F6285 4F CAL 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 of 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

## WEEDS LIST

When F6285 4F CAL is applied in accordance with the Application information and the specific crop use directions F62854F CAL applied alone or in listed tank mixtures will provide control of the following weeds Refer to the specific crop section

Table 5


| Pigweed redroot | Amaranthus retroflexus |
| :--- | :--- |
| Pigweed smooth | Amaranthus hybndus |
| Plantain blackseed | Plantago rugelli decne |
| Plantain narrow leaved | Plantago lanceolata |
| Poorioe | Diodia tees |
| Porophyllum | Porphyllum rederale |
| Poinsettia wild | Euphorbia heterophylla |
| Purslane common | Portulaca oleracea |
| Redmaids | Calandnnia ciliata |
| Redweed | Melochia corchonfolia |
| Sedge annual | Carex spp |
| Senna coffee | Cassia occidentalis |
| Sheperdspurse | Capsella bursa pastors |
| Side prickly | Soda spinosa |
| Sid Southern | Soda acuta |
| Signalgrass broadleaf | Brachiana platyphylla |
| Smartweed PA (seedling) | Polygonum pensylvanicum |
| Smellmellon | Cucumis melo |
| Starbur bristly | Acanthospermum hispidum |
| Stinkgrass | Eragrostis cilianensis |
| Toadflax yellow | Linana vulgans |
| Tassleflower red | Emilio sonchifolia |
| Thistle Russian | Salsola Rall |
| Waterhemp common | Amaranthus rudis |
| Waterhemp tall | Amaranthus fuberculatos |
| Waterprimrose winged | Ludwigia decurrens |
| Witchgrass | Panicum capillare |

## REPLANTING INSTRUCTIONS

If initial planting of labeled crops falls to produce a stand only labeled crops for F6285 4F CAL or the tank mix partner whichever is most restrictive may be planted Do not retreat field with F6285 4F CAL or other herbicide containing sulfentrazone Do not plant treated fields with any crop at intervals that are inconsistent with the Rotational Crop Guidelines on this label When replanting use minimum soil tillage to preserve the herbicide barrier and achieve maximum weed control

## ROW CROPS

## CORN (Field Corn, Seed Corn, Popcorn) (For Use Only with GMO Varieties Tolerant to PPO Herbicides)

Table 6


## Preplant (Fall Applications)

F62854F CAL may be applied in the fall as a preplan treatment prior to corn planting the following spring
F6285 4F CAL can be used alone or in a tank mixture with other herbicides to control susceptible broad leaves sedges and grasses in corn Apply F6285 4F CAL in conventional tillage or conservation tillage (reduced tillage or no tillage) cropping systems using rates listed in the Table 6 F6285 4F CAL should be applied to the stubble or sol surface and allow moisture from rainfall or snow to move the product into the soil Do not mechanically incorporate in the fall or spring as this operation can destroy the herbicide barrier allowing weed escapes to occur Do not apply to frozen sols or existing snow cover to prevent F62854F CAL runoff from rain or snowmelt that may occur following application F6285 4F CAL may be tankmixed with other burndown herbicides to control emerged weeds in the fall or residual soil herbicides that are labeled for fall use on corn Select the correct F6285 4F CAL use rate
for corn from the Table 6 for your soil type and organic matter Due to the extended period of time between the fall application and corn planting the use rate of F6285 4F CAL. should be the mid to high rate within the rate range for the appropriate soil type and organic matter

## Early Preplant and Preemergence (Spring Applications)

F6285 4F CAL may be applied preplan on the soil surface in the spring to control weeds in conventional and conservation tillage systems F6285 4F CAL can be applied from 45 days prior to planting until 3 days after planting as a preemergence broadcast or banded soil application if corn seedlings have not broken the soil surface and if the seed furrow is completely closed For preemergence applications 14 to 45 days prior to planting use the mid to high rate in the appropriate rate range for the soil and organic matter type listed in Table 6 F6285 4F CAL can be tank mixed with other herbicides labeled for use in corn To control insect pests such as cutworm or armyworm that may be present F62854F CAL may be tankmixed with insecticides including Mustang Max or Capture 2EC If dry conditions persist following preemergence application of F6285 4F CAL a shallow incorporation may be needed to activate the herbicide if weeds are emerged at the time of F6285 4F CAL application use a burndown herbicide in conjunction with F6285 4F CAL as needed When planting into soil treated preplant with F6285 4F CAL minimize soil disturbance to maintain the herbicide barrier on the soil surface to achieve maximum weed control Observe all precautions instructions and rotational cropping guidelines of each product s label when tank mixing including all references to potential carryover and crop injury warnings or restrictions

## Preplant incorporated

F6285 4F CAL may be applied as a Preplant Incorporated treatment in the spring prior to planting in reduced and conventional tillage corn F6285 4F CAL should be shallowly incorporated or mixed thoroughly into the soil to a maximum depth of 2 inches using a correctly adjusted implement such as a field cultivator field finisher or disk harrow Incorporating F6285 4F CAL deeper than 2 inches may result in inconsistent weed control Use the appropriate rate from Table 6 for the soil texture organic matter and pH level of the soil F6285 4F CAL can be tankmixed with other soil applied herbicides and insecticides labeled for preplant incorporation in corn Observe all precautions instructions and rotational cropping guidelines of each product $s$ label when tank mixing including all references to potential carryover and crop injury warnings or restrictions
F6285 4F CAL may be applied more than once to the same crop in split or sequential applications to provide season long control of difficult to control existing or late emerging weeds

## Precautions

These Crop Specific Use directions are based upon the interactive effects of F62854F CAL (sulfentrazone) 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 Application Instructions F6285 4F CAL 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 F6285 4F CAL Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL under specific local conditions

## Restrictions

Do not apply more than 120 fluid ounces ( 0375 pound active) per twelve month period The twelve month period is considered to begin upon the initial F62854F CAL application

## Do not use on soils classified as sand which have less than $\mathbf{1 \%}$ organic matter

Do not apply to frozen soils or existing snow cover to prevent F62854F CAL runoff from rain or snowmelt that may occur following application

## FALLOW OR POST HARVEST BURNDOWN

F6285 4F CAL may be applied in the fall following crop harvest or in existing fallow fields of asparagus cabbage corn dry shell peas and beans horseradish limes mint peanuts potatoes soybeans sugarcane sunflowers and tobacco

Table 7


## Fall Application

F6285 4F CAL may be applied in the fall following crop harvest or in existing fallow fields to control or suppress weeds the followng season The F6285 4F CAL Rotational Crop Guidelines in Table 4 must be followed if crops are planted the next season F6285 4F CAL 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 F6285 4F CAL runoff from rain or snow that may occur following application F62854F CAL may be tankmixed with herbicides to control emerged weeds Sequential applications may be needed depending on weed size in situations where weed size may interfere with F6285 4F CAL reaching the soll surface a separate burndown application prior to the application of 662854 F CAL will be required Use listed rates of burndown herbicides in combination with F6285 4F CAL or sequential applications as needed Higher aerial spray volumes are required when there is a dense weed population or canopy

F6285 4F CAL can be tankmixed with other herbicides Observe all precautions instructions and rotational cropping guidelines of each product s label when tank mixing including all references to potential carryover and crop injury warnings or restrictions

## Spring Preemerge Application

F6285 4F CAL may be applied as a fallow treatment early in the spring provided the application is made prior to weed emergence and adequate moisture is available to activate the F62854F CAL Follow the same use rate recommendations and application guidelines listed under the Fall Application section above
Weeds Controlled
When applied according to directions F6285 4F CAL will provide control of

| Filaree redstem | Pigweed redroot |
| :--- | :--- |
| Kochia (ALS and Triazine Resistant) | Pigweed smooth |
| Lambsquarters common | Thistle Russian |
| Morningglory ivyleaf | Waterhemp common |
| Morningglory tall | Waterhemp tall |
| Nightshade Eastern Black |  |

For information on other weeds not listed above refer to Weeds Controlled section of this label

## Precautions

These Crop Specific Use directions are based upon the interactive effects of F62854F CAL (sulfentrazone) 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 Application Instructıons F62854F CAL 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 F6285 4 F CAL. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL under specific local conditions

## Use Restrictions

Do not apply more than 80 fluid ounces ( 025 lb active) per twelve month period The twelve month period is considered to begin upon the initial F6285 4F CAL application

## 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 F62854F CAL runoff from rain or snowmelt that may occur following application

## PEANUTS

Apply F6285 4F CAL alone or in combination with other registered herbicides for the control of key grass and broadleaf weeds in peanut production Refer to the information below for specific use directions

## Application instructions

F6285 4F CAL may be preplant incorporated (to a depth no greater than 2 inches) up to 14 days prior to planting Alternatively F6285 4F CAL may be applied to the soil surface at planting or within 12 hours after plantıng Incorporation of F6285 4F CAL deeper than 2 inches can result in adverse crop response and/or inconsistent weed control Do not use F62854F CAL for at crack type applications or apply to exposed peanut tissue Such use can result in significant adverse crop response For optimum performance a combination of F6285 4F CAL plus a grass herbicide labeled for peanuts is recommended Under conditions of exceptionally high weed populations or when weeds not controlled by F62854F CAL are anticipated the use of suitable post emergent peanut herbicides is recommended Broadcast apply the correct F62854F CAL use rate from the tables below in a minımum of 10 gallons of water per acre of finıshed spray Banded F62854F CAL application rates must be adjusted in proportion to the broadcast rate

## F6285 4F CAL Use Rates and Weeds Controlled in Coarse Sols'

When applied as directed at 48 fluid ounces ( 015 pound active ingredient) per acre F6285 4F CAL will provide Control of the listed weeds

| Amaranth spleen | Jimsonweed |
| :--- | :--- |
| Copperleaf hophornbeam | Lambsquarters common |
| Croton tropic | Morningglory entireleaf |
| Crownbeard golden | Morningglory red |
| Devilsclaw |  |

When applied as directed at 64 fluid ounces ( 02 pound active ingredient) per acre F6285 4F CAL will provide
Control of the listed weeds

| All the weeds controlled at $\mathbf{4} \mathbf{8 \mathrm { fl } \text { oas plus }}$ |  |
| :--- | :--- |
| Amaranthus Palmer | Morningglory smallflower |
| Crabgrass large | Poinsettia wild ${ }^{2}$ |
| Crabgrass Southern | Redweed |
| Eclipta | Senna coffee |
| Goosegrass | Signalgrass broadleaf |
| Morningglory pitted | Smartweed PA (seedling) |

When applied as directed at 80 fluid ounces ( 025 pound active ingredient) per acre F6285 4F CAL will provide

## Control of the listed weeds

| All the weeds controlled at 64 fl ozs plus |  |
| :--- | :--- |
| Anoda spurred | Purslane common |
| Cocklebur common | Sida prickly |
| Nutsedge yellow | Starbur prickly |
| Nutsedge purple |  |

${ }^{1}$ Use rates are F6285 4F CAL fluid ounces per acre Specified weeds are controlled in coarse (sand and loamy sand) soils Medium and fine soils (sandy loam clay loam clay) or soils with organic matter greater than $10 \%$ should use the next
higher rate in the table above The next higher rate for 80 fluid ounces ( 025 lb al) should not exceed 96 fluid ounces ( 03 lb ai) per acre
${ }^{2}$ Controls initial and several continuing flushes (geminations) of wild poinsettia
${ }^{3}$ Purple nutsedge activity is based on preplant incorporated applications of F 62854 F CAL Pre-emergence surface applications may provide control ( $>85 \%$ ) under certain circumstances Otherwise purple nutsedge will be partially controlled ( 71 to $84 \%$ )
In soils with pH greater than 7 use the next lower F62854F CAL application rate Irrigation with alkaline (pH 8 to 9 ) water can result in adverse crop response The extent of crop response is dependent on F6285 4F CAL application rate soil type (including \%OM and pH ) timing (after F6285 4F CAL application relative to crop emergence) amount and pH of irrigation water Do not irrigate with water greater than pH 9
After peanuts are established ( 4 to 6 across in size) the alkalinity of irrigation water has minimal impact on crop growth
For information on other weeds not listed above refer to Weeds Controlled section (Table 5) in this label

## Precautions

These Crop Specific Use directions are based upon the interactive effects of F62854F CAL (sulfentrazone) 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 Application Instructions F62854F CAL 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 F62854F CAL Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL under specific local conditions

## Restrictions

Do not apply more than 96 fluid ounces ( 03 lb al ) of F 62854 F CAL per acre per twelve month period The twelve month period is considered to begin upon the initial F6285 4F CAL application
Do not feed treated peanut forage or peanut hay to livestock
Do not use on soils classified as sand which have less than $1 \%$ organic matter
Do not irrigate with water having a pH higher than 9
Do not apply at cracking time

## POTATOES

Table 8

| F6285 4F CAL Use Rate Table (Potatoes) <br> Preemergence Application |  |  |  |
| :---: | :---: | :---: | :---: |
| Broadcast Rate | Fluid Ounces F6285 4F CAL per acre |  |  |
|  | SoIl Texture |  |  |
| \% Organic Matter | Coarse | Medium | Fine |
| $<15$ | $30-45$ | $30-45$ | $375-525$ |
| 1530 | $30-45$ | $375-60$ | $45-60$ |
| $>3$ | $45-60$ | $525-675$ | $60-80$ |

Refer to the previous information on soil types under the COARSE MEDIUM and FINE categories
Use higher rates for soils of pH less than 70 and lower rates for pH greater than 70 within the rate range

## Ground and Aerial Applications

Apply F6285 4F CAL by aerial application as a preemergence treatment following planting and after dragoff but prior to potato emergence Optimum performance can be achieved if F62854F CAL is applied to the soil surface and either rainfall or overhead irrigation is used to activate the product if no moisture is received within 7 days following application in areas without irrigation a shallow incorporation (less than 2 inches) may be needed prior to weed and potato emergence to activate the product Select the appropriate use rate based on soil texture and organic matter as shown in Table 8 above For control of emerged weeds at the time of the F6285 4F CAL application an appropriate burndown herbicide and adjuvants labeled for potatoes may be tankmixed with

F6285 4F CAL to control these weeds Do not apply F62854F CAL if the potatoes have emerged from the soll as undesirable crop response may occur F62854F CAL may be tankmixed with other soll applied herbicides labeled for use in potatoes to improve weed management and increase weed control spectrum
Apply F6285 4F CAL in a mınımum of 10 gallons of spray by ground applıcatıon and 5 gallons of spray by air

## Chemigation Applications

F6285 4F CAL may be applied to potatoes through sprinkler irrigation systems including center pivot lateral move end tow solid set or hand move irngatıon systems Apply F62854F CAL prior to potato emergence using sufficient water ( 025 to 05 inch per acre) to provide thorough soil
surface coverage but to avoid runoff of irrigation water F62854F CAL may be applied with other products labeled for chemigation use in potatoes
It is important to note that irrigatıon with highly alkaline water (high pH) followng a F62854F CAL soil application may significantly increase the amount of sulfentrazone available in soll solution Irrigation with water having a pH greater than 75 could result in adverse crop response This response will ultimately depend on initial F62854F CAL application rate application timing amount and pH of irrigation water the sensitivity of the crop and the crop growth stage when irrigated The risk of adverse crop response will lessen with advances in the crop growth stage

Weeds Controlled
When applied according to directions F6285 4F CAL will provide control of

| Amaranth Paimer | Nightshade Eastern black |
| :--- | :--- |
| Filaree redstem | Pigweed redroot |
| Kochıa (ALS and Triazıne Resıstant) | Pigweed smooth |
| Lambsquarters common | Thistle Russıan |
| Mornıngglory ıvyleaf | Waterhemp common |
| Mornıngglory tall | Waterhemp tall |

For information on other weeds not IIsted above refer to Weeds Controlled section (Table 5) in this label

## Precautions

Potato varieties may vary in their response to herbicide applications When using F62854F CAL on an untested variety always determine the crop tolerance before planting Some potato varieties including Sangre Shepody and Snowden have shown sensitivity to F62854F CAL Caution should be used when planting these varieties on marginal coarse soils

These Crop Specific Use directions are based upon the interactive effects of F6285 4F CAL (sulfentrazone) and the primary soll 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 Application Instructions F62854F CAL 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 F 62854 F CAL Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL under specific local conditions

## Restrictions

Do not use on soils classified as sand which have less than $\mathbf{1 \%}$ organic matter
Do not apply F6285 4F CAL after potato emergence from the soll as undesirable crop response may occur
Do not apply more than 80 fluid ounces ( 025 pound active) per acre per twelve month period The twelve month period is considered to begin upon the initial F62854F CAL application

## SOYBEANS

Table 9

| F6285 4F CAL Use Rate Table (Soybeans) <br> Fall Spring Early Preplant Preemergence and Preplant Incorporated Applications |  |  |  |
| :---: | :---: | :---: | :---: |
| Broadcast Rate | Fluid Ounces F6285 4F CAL per acre |  |  |
|  | Soll Texture |  |  |
| \% Organic Matter | Coarse | Medium | Fine |
| $<15$ | 45-60 | 60-80 | 80 |
| 153 | 60-80 | 80-101 | 101 |
| $>3$ | 80-101 | 101-120 | 120 |
| to the previous inf higher rates for soll | types und <br> 70 and lo | DIUM and eater than 7 |  |

## Ground and Aerial Applications

Apply F62854F CAL. in conventional tillage conservation tillage reduced tillage or no tillage cropping systems using rates listed in the F6285 4F CAL Use Rate Table 9 F6285 4F CAL may be applied with ground or aerial sprayers calibrated to deliver a minımum of 10 gallons of finıshed spray by ground application and 5 gallons of finished spray by air Use nozzle types and arrangements that will provide optımum coverage while producing a mınımal amount of fine droplets Apply sufficient spray volume to achieve adequate coverage
Preplant Incorporated and Preemergence Applications

F6285 4F CAL can be applied prior to planting or up to 3 days after planting When applications after planting are delayed greater than 3 days after planting injury may occur if seeds are germinating F62854F CAL may be applied preemergence or preplant incorporated For preplan 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 F62854F CAL applied near or after crop emergence may cause severe injury to the crop F6285 4F CAL can be applied alone or in combination with other labeled soybean herbicides F6285 4F CAL may be followed by labeled postemergence soybean herbicides for increased control of grass and broadleaf weeds Always follow the most restrictive label when tank mixing When using F6285 4F CAL in no till or minimum till cropping systems tank mix with an appropriate burndown herbicide for improved control of existing weeds

## Fall Applications

F6285 4F CAL may be applied as a fall treatment to the stubble of harvested crops for the burndown of existing vegetation and preemergence control of labeled weeds the following spring in no till and conservation tillage production systems Fall applications of F6285 4F CAL must be made in weed control programs that include as needed spring
applications of preplant preemergence or postemergence herbicides for the following crop season F62854F CAL can be applied to the stubble of a harvested crop in no till or to the soil surface of conservation tillage fields after harvest when the sustained soil temperature is 55 degrees $F$ and falling at a soil depth of 4 inches Apply after September 30 in those areas North of Interstate 90 and after October 15 in those areas North of Interstate 70 Do not apply F6285 4F CAL as a fall treatment South of Interstate 70 Applications to ridge till production systems must be made after the formation of ridges or bedded
If weeds are emerged at the time of application utilize a tank mixture with a suitable burndown herbicide at labeled rates Fall applied burndown treatments should be made with a minimum of 20 gallons per acre to achieve adequate coverage of the weeds being treated When making burndown applications to emerged weeds the addition of adjuvants such as COC or MSO to the spray mixture can be used to enhance the burndown activity of the application

Weeds Controlled
When Applied according to directions F6285 4F CAL will provide control of

| Amaranth Palmer | Nightshade |
| :--- | :--- |
| Copperleaf hophornbeam | Pigweed spp |
| Kochia (ALS and Triazine Resistant) | Soda prickly |
| Lambsquarters common | Thistle Russian |
| Morningglory spp | Waterhemp spp |

For information on other weeds not listed above refer to Weeds Controlled section (Table 5) in this label

## Precautions

When applying F62854F CAL with other registered herbicides refer to specific label information on precautions instructions limitations application methods and timings and weeds controlled
F6285 4F CAL is especially effective against a wide range of economic broadleaf and grass weeds The same processes that sulfentrazone affects in these weeds can under certain conditions be affected in soybeans These conditions include high pH (75 and above) cool weather prolonged and excessive moisture seedling diseases and any other condition including poor agronomic practices that are unfavorable to vigorous crop growth Such effects in soybeans are often observed as stunting and discoloration The duration of these effects are somewhat dependent on the duration of the adverse growing conditions These effects lessen and generally diminish with the return to normal growing conditions
These Crop Specific Use directions are based upon the interactive effects of F6285 4F CAL (sulfentrazone) 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 Application Instructions F6285 4F CAL 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 F6285 4F CAL Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL under specific local conditions

## Restrictions

Do not apply more than 120 fluid ounces ( 0375 lbs active) per acre of F62854F CAL per twelve month period The twelve month period is considered to begin upon the initial F6285 4F CAL application
Do not use on soils classified as sand which have less than $1 \%$ organic matter
Do not apply to frozen sols or existing snow cover to prevent F62854F CAL runoff from rain or snowmelt that may occur following application

Do not apply after crop seed germination

## SUGARCANE



| 153 | $60-83$ | $80-101$ | 101 |
| :---: | :---: | :---: | :---: |
| $>3$ | $80-101$ | $101-120$ | 120 |

Refer to the previous information on soil types under the COARSE MEDIUM and FINE categories
Use higher rates for soils of pH less than 70 and lower rates for pH greater than 70 within the rate range
Apply F6285 4F CAL as a broadcast or banded preemerge soil applied treatment for the control of broadleaf weeds grasses and sedges in sugarcane Refer to the F6285 4F CAL Product Use Rate Section and Table 10 for specific use information

## Planting Time Applications

Apply F6285 4F CAL preemerge to newly planted or ratoon sugarcane Use the higher rate on clay soils and/or soils with organic matter content higher than 2 percent Apply either by air in a minimum of 5 gallons of spray per acre or by ground equipment in a minimum of 15 gallons of spray per acre F6285 4F CAL may be applied with other herbicides registered for use in sugarcane

## Aerial Applications

F6285 4F CAL may be applied by ar in a minimum of 5 gallons of finished spray per acre F6285 4F CAL may be applied with other herbicides or insecticides registered for aerial application in sugarcane
Lay by Applications
Apply F6285 4F CAL as a directed spray to sugarcane at lay by timing Use the higher rate on clay soils and/or soils with organic matter content higher than 2 percent Apply as a directed spray with ground equipment in a minimum of $\mathbf{1 5}$ gallons of spray per acre F6285 4F CAL may be applied with other herbicides registered for use in sugarcane

Weeds Controlled
When applied according to directions F6285 4F CAL will provide control of

| Morningglory entireleaf | Morningglory tall |
| :--- | :--- |
| Morningglory ivyleaf | Pigweed red root |
| Morningglory red | Nutsedge yellow |

For information on other weeds not listed above refer to Weeds Controlled section (Table 5) in this label

## Precautions

These Crop Specific Use directions are based upon the interactive effects of F6285 4F CAL (sulfentrazone) 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 Application Instructions F62854F CAL 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 F62854F CAL Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL under specific local conditions

## Restrictions

Pie harvest Interval (PHI) Do not apply within 120 days of harvest
Do not use on soils classified as sand which have less than $1 \%$ organic matter
Do not allow spray to contact crop leaves
Do not apply more than 120 fluid ounces ( 0375 lbs active) per acre of F6285 4F CAL per acre per twelve month period The twelve month period is considered to begin upon the initial F6285 4F CAL application

## SUNFLOWER SUBGROUP 20B

Calendula Castor oil plant Chinese tallowtree Euphorbia Evening primrose Jojoba Niger seed Rose hip Safflower Stokes aster Sunflower Tallowwood Tea oil plant Vernonia cultivars varieties and/or hybrids of these

Table 11


## Fall Applications

F62854F CAL may be applied in the fall as a preplan treatment to control or suppress weeds prior to planting the following spring F6285 4F CAL should be applied to the stubble or sol surface and allow moisture from rainfall or snow to move the product into the soil Do not mechanically incorporate in the fall or spring as this can destroy the herbicide barrier and allowing weed escapes to occur Do not apply to frozen soils or to existing snow cover to prevent F62854F CAL runoff from rain or snow melt that may occur following application F6285 4F CAL may be tank mixed with other residual soil herbicides that are labeled for fall use on sunflowers
or other crops in subgroup 20B If weeds are emerged at the time of F 6285 4F CAL application use a burndown herbicide such as glyphosate or paraquat at the full labeled rate in combination with F62854F CAL or split application as needed Select the appropriate rate from Table 11 above within the correct soil type and organic matter range When applying F6285 4F CAL in the fall use a mid to high rate within the rate range for the appropriate sol type and organic matter

## Early Preplant and Preemergence (Spring Applications)

F62854F CAL may be applied preplant on the sol surface in the spring to control weeds F62854F CAL can be applied early preplan prior to planting up to 3 days after planting as a preemerge soil application if seedlings have not broken the soil surface and if the seed furrow is completely closed For preemerge applications greater than 3 weeks prior to planting use the high rate within the appropriate rate range for the soil and organic matter type listed in the use rate chart above (Table 13) If applying F6285 4F CAL to course textured soils with less than $15 \%$ organic matter wait a minimum of 7 days after application before planting F6285 4F CAL_ can be tank mixed with other preemerge herbicides labeled for sunflowers or other crops in subgroup 20B If dry conditions persist following preemerge application of F62854F CAL a shallow incorporation may be needed to incorporate and activate the herbicide If weeds are emerged at the time of F62854F CAL application use a burndown herbicide at the full labeled rate in combination with F6285 4F CAL or split application as needed

## Preplant Incorporated (PPI)

F6285 4F CAL may be applied as a Preplant Incorporated treatment in the spring prior to planting in reduced and conventional tillage F6285 4F CAL should be shallowly incorporated in the soil no deeper than 2 inches Incorporating F6285 4F CAL deeper than 2 inches can result in inconsistent weed control Use the appropriate rate from Table 11 above for the soil texture organic matter and pH level F6285 4F CAL can be tankmixed with other soil applied herbicides labeled for preplan incorporation in sunflowers or other crops in subgroup 20B
Weeds Controlled
When applied according to directions F6285 4F CAL will provide control of

| Amaranth Palmer | Pigweed red root |
| :--- | :--- |
| Flare redstem | Pigweed smooth |
| Kochia (ALS and Triazine Resistant) | Sida prickly |
| Lambsquarters common | Thistle Russian |
| Morningglory ivyleaf | Waterhemp common |
| Morningglory tall | Waterhemp tall |
| Nightshade Eastern black |  |

For information on other weeds not listed above refer to Weeds Controlled section (Table 5) in this label

## Precautions

When applying F6285 4F CAL to coarse textured soils it is recommended that growers allow a minimum of 714 days from application to planting Best results are achieved with F62854F CAL when applications are made early preplan and greater than 14 days before planting
Some adverse crop response may occur on coarse textured soils with low organic matter (less than $15 \%$ ) and pH of 78 or higher or on highly eroded sols or in areas of calcareous outcroppings F62854F CAL use rates should be reduced in those areas Inadequate seed furrow closure or shallow planting (less than 10 inch ) may result in undesirable crop response As expected poor growing conditions such as excessive moisture low temperatures sol compaction and diseases may also cause undesirable crop response
These Crop Specific Use directions are based upon the interactive effects of F62854F CAL (sulfentrazone) 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 Application Instructions F6285 4F CAL 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 F6285 4F CAL Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL under specific local conditions

## Restrictions

Do not apply more than 80 fluid ounces ( 025 pound active) of F62854F CAL per twelve month period to sunflowers The twelve month period is considered to begin upon the initial F62854F CAL application

Do not apply to frozen soils or existing snow cover to prevent F6285 4F CAL runoff from rain or snowmelt that may occur following application
Do not use on soils classified as sand which have less than $1 \%$ organic matter
Do not incorporate greater than 2 inches deep

## TOBACCO (Burley, Flue Cured and Dark)

Table 12

| F6285 4F CAL Use Rate Table (Tobacco) <br> Preemergence and Preplan Incorporated Applications |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Broadcast Rate | Fluid Ounces F6285 4F CAL per acre |  |  |  |
|  | SoIl Texture |  |  |  |
| $\%$ Organic Matter | Coarse | Medium | Fine |  |
| $<15$ | $45-60$ | $60-80$ | 80 |  |


| 153 | $60-80$ | $80-101$ | 101 |
| :---: | :---: | :---: | :---: |
| $>3$ | $80-101$ | $101-120$ | 120 |
| Refer to the previous information on soIl types under the COARSE MEDIUM and FINE categories |  |  |  |
| Use higher rates for soils of pH less than 70 and lower rates for pH greater than 70 within the rate range |  |  |  |

F6285 4F CAL may be surface applied or preplant incorporated (to a depth no greater than 2 inches) from 14 days to 12 hours days prior to transplanting tobacco Incorporating F62854F CAL deeper than 2 inches can result in inconsistent weed control
Broadcast apply the appropriate F6285 4F CAL rate from Table 12 above in a minimum of 10 gallons per acre of water to the soil prior to transplanting

## Non Bedded (Fields where raised beds are NOT formed prior to transplanting)

Perform all accepted cultural practices for land preparation fertilizer/fungicide incorporation etc prior to the application of F62854F CAL Once the field has been prepared for planting F62854F CAL may be surface applied or lightly preplant incorporated from 14 days to 12 hours prior to transplanting
If F6285 4F CAL is surface applied and it is necessary to remove equipment tracks from the field after application but prior to transplanting any light finishing equipment may be used providing the soil is not disturbed to a depth greater than 2 inches
If timely cultivations are not performed following a pret transplant surface application reduced/unacceptable weed control may occur in the drill
Bedded (Fields where raised beds ARE formed PRIOR to transplanting)
Apply F6285 4F CAL to formed beds as a surface application from 14 days to 12 hours prior to transplanting if it is customary to drag/knock down beds prior to transplanting this procedure must be performed prior to the F6285 4F CAL application
When incorporating prior to bedding F6285 4F CAL must be thoroughly and uniformly incorporated to a depth no greater than 2 inches to avoid concentrating F6285 4F CAL in the bed
If initial transplanting fails to produce a uniform stand tobacco may be replanted DO NOT re treat field with a second application of F6285 4F CAL or any other herbicide containing sulfentrazone DO NOT re bed Re transplant into previously formed treated beds
For broad spectrum and optimum grass weed control a grass herbicide application will be required
Weeds Controlled
When Applied according to directions F6285 4F CAL will provide control of

| Amaranthus livid | Pigweed redroot |
| :--- | :--- |
| Flare redstem | Pigweed smooth |
| Galınsoga hairy | Sida prickly |
| Lambsquarters common | Signalgrass broadleaf |
| Morningglory ivyleaf | Smartweed Pennsylvania |
| Morningglory tall |  |

For information on other weeds not listed above refer to Weeds Controlled section (Table 5) in this label

## Precautions

Poor agronomic practices unfavorable pH soils diseases cold weather excessive moisture drought or other conditions unfavorable to normal plant growth may adversely effect the growth of tobacco transplants Weakened transplants may be more susceptible to herbicide response and diseases particularly under poor drainage or compacted soil conditions or when the soil has been saturated for long periods of time Contact your State Agricultural Extension Service Specialist for consultation as to the agronomic recommendations suited for your tobacco varieties and local conditions Temporary stunting of tobacco may occur if transplants are set too shallowly or if heavy rainfall occurs immediately following transplanting Splashing of treated soil onto tobacco leaves may cause some localized and inconsequential necrosis Use sound transplanting practices that insure treated soil will not wash or crust over tobacco plants
These Crop Specific Use directions are based upon the interactive effects of F62854F CAL (sulfentrazone) 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 Application Instructions F62854F CAL 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 F 62854 F CAL Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F62854F CAL under specific local conditions

## Restrictions

## Do not use on Shade Grown Tobacco

## Do not apply F6285 4F CAL to soils classified as sands containing less than $1 \%$ organic matter

Do not use F6285 4F CAL in tobacco seeding beds or greenhouses
Do not apply F6285 4F CAL post transplant as unacceptable injury may occur
Do not perform tillage practices that concentrate F62854F CAL into the bed or crop injury may occur
Do not apply more than 120 fluid ounces ( 0375 Ibs active) per acre of 62854 F CAL per acre per twelve month period The twelve month period is considered to begin upon the initial F62854F CAL application

Do not incorporate greater than 2 inches deep

## VEGETABLE CROPS

Before applying F6285 4F CAL to vegetable crops users producers and/or applicators must read and follow the information presented in the Conditions of Sale and Limitation of Warranty and Llability section on page 2 of this label

## ASPARAGUS

Table 13

| F6285 4F CAL Use Rate Table (Asparagus) <br> Spring Preemergence Applications |  |  |  |
| :---: | :---: | :---: | :---: |
| Broadcast Rate | Fluid Ounces F6285 4F CAL per acre |  |  |
|  | Soil Texture |  |  |
| \% Organıc Matter | Coarse | Medium | Fine |
| $<15$ | 45-60 | 60-80 | 80 |
| 153 | 60-80 | 80-101 | 101 |
| >30 | 80-101 | 101-120 | 120 |
| Refer to the use rate information on soll types under the COARSE MEDIUM and FINE categories Use higher rates for soils of pH less than 70 and lower rates for pH greater than 70 within the rate range |  |  |  |

Apply F6285 4F CAL as a broadcast treatment to crowns established for one or more years
Apply in the spring before the crop and weeds emerge F6285 4F CAL should be applied at 45 to 12 fluid ounces ( 0141 to 0375 pound active) per acre in 10 to 40 gallons of finished spray per acre F6285 4F CAL may be applied with other pesticides registered for use wth asparagus

## Weeds Controlled

When Applied according to directions F62854F CAL will provide control of

| Amaranth Palmer | Nightshade Eastern black |
| :--- | :--- |
| Galinsoga haıry | Nutsedge yellow |
| Lambsquarters common | Pigweed redroot |
| Morningglory ivyleaf | Pigweed smooth |

For information on other weeds not listed above refer to Weeds Controlled section (Table 5) in this label

## Precautions

These Crop Specific Use directions are based upon the interactive effects of F6285 4F CAL (sulfentrazone) 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 Application Instructions F6285 4F CAL Product Use Rates Rotational Crop Gudelines 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 whth F6285 4F CAL Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL under specific local conditions

## Restrictions

## Do not apply within 14 days prior to harvest

Do not apply more than 120 fluid ounces ( 0375 pound active) per acre per 12 month period
Do not make more than one F6285 4F CAL application per acre per 12 month period The twelve month period is considered to begin upon the initial F6285 4F CAL application
Do not use on soils classified as sand which have less than $1 \%$ organic matter

## BRASSICA, HEAD AND STEM

Broccolı Chinese broccolı brussels sprouts Chınese (napa) cabbage Chinese mustard cauliflower cavalo broccoli kohlrabı)

Table 14

| F6285 4F CAL Herbıcıde Use Rate Table <br> (Head and Stem Brassica) <br> Fall or Spring Early Preplant Preemergence and Preplant Incorporated Applications |  |  |  |
| :---: | :---: | :---: | :---: |
| Broadcast Rate | Fluid Ounces F6285 4F CAL Herbicide per acre |  |  |
|  | Soil Texture |  |  |
| \% Organıc Matter | Coarse | Medium | Fine |
| <15\% | 225-30 | 30-45 | 30-60 |
| 15-30\% | 30-60 | 60-90 | 60-90 |
| >30\% | 60-90 | 60-120 | 60-120 |

```
Refer to the previous information on soll types under the COARSE
MEDIUM and FINE categories
Use higher rates for solls of pH less than 70 and lower rates for pH
greater than }70\mathrm{ within the rate range
```

Early Preplant and Preemergence (Fall Application or Spring Application)
F6285 4F CAL Herbcide may be applied in the fall or spring preceding the growing season up to 72 hours prior to transplanting head and stem brassica F6285 4F CAL Herbicide should be applied to the harvested crop stubble or soll surface without incorporation Moisture in the form of rain or snow will move and activate the product into the soil Do not mechanically incorporate in the fall or spring after application as this may destroy the herbicide barrier and weed escapes can occur Do not apply to frozen soils to prevent F6285 4F CAL Herbicide runoff from ran or snow that may occur following application F62854F CAL Herbicide may be tank mixed with other burndown herbicides to control emerged weeds in the fall or spring or with residual soll herbicides that are labeled for use on head and stem brassica Use the listed rates of burndown herbicides in combination with F6285 4F CAL Herbicide or split applications as needed Observe all precautions instructions and rotational cropping guidelines of each products label when tank mixing including all references to potential carryover and crop injury warnings or restrictions

## Preplant Incorporated (PPI)

F6285 4F CAL Herbicide may be applied as a preplant incorporated treatment in the spring prior to transplanting head and stem brassica Do not incorporate to depths greater than 2 inches F6285 4F CAL Herbicide can be tank mixed with other burndown or soil applied herbicides labeled for use in head and stem brassica Use the listed rates of burndown herbicides or split applications as needed Observe all precautions instructions and rotational cropping guidelines of each product s label when tank mixing including all references to potential carryover and crop injury warnings or restrictions

Weeds Controlled
When Applied according to directions F6285 4F CAL Herbicide will provide control of

| Galinsoga haıry | Waterhemp common |
| :--- | :--- |
| Lambsquarters common | Waterhemp tall |
| Pigweed redroot |  |

## Precautions

These Crop Specfic Use directions are based upon the interactive effects of F62854F CAL Herbicide (sulfentrazone) and the primary soll 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 Application Instructions F62854F CAL 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 F6285 4F CAL Herbicide Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F62854F CAL Herbicide under specific local conditions

## Restrictions

Do not apply more than 120 ounces ( 0375 pound active) per acre of F6285 4F CAL Herbicide per application or per twelve month period The twelve month period is considered to begin upon the intial F62854F CAL application

Do not use on soils classified as sand which have less than $1 \%$ organic matter
Do not incorporate to depths greater than 2 inches

## BRASSICA, LEAFY GREENS

Broccoli raab Chinese (bok choy) cabbage collards kale mizuna mustard greens mustard spinach rape greens
Table 15

## F6285 4F CAL Herbıcıde Use Rate Table

 (Leafy Brassica)| Fall or Spring Early PreplantPreemergence and Preplant Incorporated <br> Applications |  |  |  |
| :---: | :---: | :---: | :---: |
| Broadcast Rate | Fluid Ounces F6285 4F CAL Herbicide per acre |  |  |
|  | Soll Texture |  |  |
|  | \% Organıc <br> Matter | Coarse | Medıum |
| $<15 \%$ | $225-30$ | Fine |  |
| $\mathbf{1 5 - 3 0 \%}$ | $30-60$ | $30-45$ | $30-60$ |
| $>30 \%$ | $60-64$ | $60-64$ | $60-64$ |

Refer to the previous information on soll types under the COARSE MEDIUM and FINE categories
Use higher rates for solls of pH less than 70 and lower rates for pH greater than 70 within the rate range

Early Preplant and Preemergence (Fall Application or Spring Application)
F6285 4F CAL Herbicide may be applied in the fall or spring preceding the growing season up to 72 hours prior to planting leafy brassica F62854F CAL 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 into the soil Do not mechanically incorporate in the fall or spring after application as this may destroy the herbicide barrier and weed escapes can occur Do not apply to frozen soils to prevent F62854F CAL Herbicide runoff from rain or snow that may occur following application F62854F CAL. Herbicide may be tank mixed with other burndown herbicides to control emerged weeds in the fall or spring or with residual soil herbicides that are labeled for use on cabbage Use the listed rates of turndown herbicides in combination with F6285 4F CAL Herbicide or split applications as needed Observe all precautions instructions and rotational cropping guidelines of each products label when tank mixing including all references to potential carryover and crop injury warnings or restrictions

## Prepiant Incorporated (PPI)

F6285 4F CAL. Herbicide may be applied as a preplant incorporated treatment in the spring prior to planting leafy brassica Do not incorporate to depths greater than 2 inches F6285 4F CAL Herbicide can be tank mixed with other burndown or soil applied herbicides labeled for use in leafy brassica Use the listed rates of burndown herbicides or split applications as needed Observe all precautions instructions and rotational cropping guidelines of each product s label when tank mixing including all references to potential carryover and crop injury warnings or restrictions

## Weeds Controlled

When Applied according to directions F6285 4F CAL Herbicide will provide control of

| Galınsoga hairy | Waterhemp common |
| :--- | :--- |
| Lambsquarters common | Waterhemp tall |
| Pigweed redroot |  |

## Precautions

These Crop Specific Use directions are based upon the interactive effects of F6285 4F CAL Herbicide (sulfentrazone) 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 Application Instructions F6285 4F CAL 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 F6285 4F CAL Herbicide Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F62854F CAL Herbicide under specific local conditions

## Restrictions

Do not apply more than 64 fluid ounces ( 020 pound active) per acre of F6285 4F CAL Herbicide per application or per twelve month period The twelve month period is considered to begin upon the initial F6285 4F CAL application

Do not use on soils classified as sand which have less than $1 \%$ organic matter
Do not incorporate to depths greater than 2 inches

## CABBAGE (Transplanted Only)

Table 16


## Early Preplant (Fall Application or Spring Application)

F6285 4F CAL may be applied in the fall or spring preceding the growing season to control weeds prior to or up to the planting or transplanting of cabbage F62854F CAL may be applied in the spring from 60 days prior to planting up to planting time F62854F CAL 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 into the soil Do not mechanically incorporate in the fall or spring after application as this may destroy the herbicide barrier and weed escapes can occur Do not apply to frozen soils to prevent F6285 4F CAL runoff from rain or snow that may occur following application F6285 4F CAL may be tankmixed with other burndown herbicides to control emerged weeds in the fall or spring or with residual soil herbicides that are labeled for fall use on cabbage Use the listed rates of burndown herbicides in combination with F6285 4F CAL or split applications as needed Observe all precautions instructions and rotational
cropping guidelines of each product s label when tank mixing including all references to potential carryover and crop injury warnings or restrictions

## Preplant Incorporated (PPI)

F6285 4F CAL may be applied as a preplant incorporated treatment in the spring prior to transplanting of cabbage Do not incorporate to depths greater than 2 inches F6285 4F CAL can be tankmixed with other burndown or soil applied herbicides labeled for use in cabbage Use the listed rates of turndown herbicides or split applications as needed Observe all precautions instructions and rotational cropping guidelines of each products label when tank mixing including all references to potential carryover and crop injury warnings or restrictions

## Transplant Cabbage

F6285 4F CAL may be applied pere emergence as a broadcast or banded treatment to transplanted cabbage only Applications should be made broadcast or banded treatment prior to transplanting F62854F CAL may be applied as a banded treatment into the row middles within 72 hours after transplanting

## Weeds Controlled

When Applied according to directions F6285 4F CAL will provide control of

| Galinsoga hairy | Waterhemp common |
| :--- | :--- |
| Lambsquarters common | Waterhemp tall |
| Pigweed redroot |  |

For information on other weeds not listed above refer to Weeds Controlled section (Table 5) in this label

## Precautions

These Crop Specific Use directions are based upon the interactive effects of F6285 4F CAL (sulfentrazone) 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 Application Instructions F6285 4F CAL 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 F6285 4F CAL Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL under specific local conditions

## Restrictions

Do not apply more than 12 fluid ounces ( 0375 pound active) per acre of $F 62854 \mathrm{~F}$ CAL per application or per twelve month period The twelve month period is considered to begin upon the initial F62854F CAL application
Do not use on soils classified as sand which have less than $1 \%$ organic matter
Do not incorporate to depths greater than 2 inches

## DRY SHELLED BEANS AND PEAS

Dried cultivars of bean (Lupins) bean (Phaseolus)(includes field bean kidney bean lima bean (dry) navy bean pinto bean tepary bean) bean (Vigna) (includes adzukı bean blackeyed pea catjang cowpea crowder pea moth bean lentil mung bean rice bean southern pea urd bean) broad bean (dry) chickpea guar lab lab bean pea (Pisum) (includes field pea) and pigeon pea

Table 17

| F6285 4F CAL Use Rate Table (Dry Shelled Beans Peas) |  |  |  |
| :---: | :---: | :---: | :---: |
| Fall or Spring Early Preplant Preemergence and Preplant Incorporated Applications |  |  |  |
| Fluid Ounces F6285 4F CAL per acre |  |  |  |
| Broadcast Rate | SoIl Texture |  |  |
| $\%$ Organic Matter | Coarse | Medium | Fine |
| $<15 \%$ | $225-30$ | $30-45$ | $30-45$ |
| $1530 \%$ | $30-450$ | $375-60$ | $45-60$ |
| $>30 \%$ | $375-60$ | $45-675$ | $525-80$ |

Refer to the previous information on soil types under the COARSE MEDIUM and FINE categories
Use higher rates for soils of pH less than 70 and lower rates for pH greater than 70 within the rate range

## Early Preplant and Fall Applications

F6285 4F CAL may be applied in the fall as a preplant treatment to control or suppress weeds prior to planting the following spring F6285 4F CAL should be applied to the stubble or soil surface and allow moisture from rainfall or snow to move the product into the soil Do not mechanically incorporate in the fall or spring as this can destroy the herbicide barrier and weed escapes can occur Do not apply to frozen soils or to existing snow cover to prevent F62854F CAL runoff from ran or snow melt that may occur following application F62854F CAL may be tank mixed with other residual soil herbicides that are labeled for fall use on dry bean and dry peas If weeds are emerged at the time of F6285 4F CAL application use a burndown herbicide such as glyphosate or paraquat at the full labeled rate in combination with F6285 4F CAL or split application as needed Select the appropriate rate from Table 17 above within the correct soil type and organic matter range When applying F6285 4F CAL in the fall use a mid to high rate within the rate range for the appropriate soil type and organic matter

## Early Preplant and Preemergence (Spring Applications)

F6285 4F CAL may be applied preplant on the soil surface in the spring to control weeds in dry bean and dry peas F6285 4F CAL can be applied early preplant prior to planting up to 3 days after planting as a preemerge soil application if seedlings have not broken the soil surface and if the seed furrow is completely closed For preemerge applications greater than 3 weeks prior to planting use the high rate within the appropriate rate range for the soil and organic matter type listed in the use rate chart above Table17 If applying F6285 4F CAL to course textured soils with less than $15 \%$ organic matter wait a minimum of 7 days after application before planting F62854F CAL can be tank mixed with other preemerge herbicides labeled for dry bean and dry peas use If dry conditions persist following preemerge application of F6285 4F CAL a shallow incorporation may be needed to incorporate and activate the herbicide if weeds are emerged at the time of F6285 4F CAL application use a burndown herbicide at the full labeled rate in combination with F6285 4F CAL or split application as needed

## Preplant Incorporated (PPI)

F6285 4F CAL may be applied as a Preplant Incorporated treatment in the spring prior to planting in reduced and conventional tillage dry bean and dry pea Do not incorporate to depths greater than 2 inches F62854F CAL use rates for PPI applications are similar to those used in preplant and preemergence applications F6285 4F CAL can be tankmixed with other burndown or soil applied herbicides labeled for use in dry bean or dry pea Use the listed rates of burndown herbicides or split applications as needed Observe all precautions instructions and rotational cropping guidelines of each products label when tank mixing including all references to potential carryover and crop injury warnings or restrictions
Weeds Controlled
When applied according to directions F6285 4F CAL will provide control of

| Amaranth Palmer | Pigweed red root |
| :--- | :--- |
| Filaree redstem | Pigweed smooth |
| Kochi | (ALS and Triazine Resistant) |
| Soda prickly |  |
| Lambs quarters common | Thistle Russian |
| Morningglory ivleaf | Waterhemp common |
| Morningglory tall | Waterhemp tall |
| Nightshade Eastern black |  |

For information on other weeds not listed above refer to Weeds Controlled section (Table 5) in this label

## Precautions

When applying F62854F CAL to coarse textured sols it is recommended that growers allow a minimum of 714 days from application to planting Best results are achieved with F6285 4F CAL when applications are made early preplan and greater than 14 days before planting
Under extended periods of dry weather adequate weed control may not be achieved
Some adverse crop response may occur on coarse textured sols with low organic matter (less than $15 \%$ ) and pH of 78 or higher or on highly eroded soils or in areas of calcareous outcroppings F62854F CAL use rates should be reduced in those areas Inadequate seed furrow closure or shallow planting (less than 10 inch ) may result in undesirable crop response As expected 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 F6285 4F CAL (sulfentrazone) 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 Application Instructions F6285 4F CAL 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 F62854F CAL Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL under specific local conditions

## Restrictions

Do not apply more than 80 fluid ounces ( 025 pound active) total per twelve month period The twelve month period is considered to begin upon the initial F6285 4F CAL application

Do not apply after crop emerges or if the seeding 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 F62854F CAL 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

## FRUITING VEGETABLES (EXCEPT CUCURBITS) AND OKRA

African eggplant bush tomato bell pepper cocona currant tomato eggplant garden huckleberry goji berry groundcherry martynia naranjilia okra pea eggplant pepino pepper bell pepper nonbell rosella scarlet eggplant sunberry tomatillo tomato tree tomato cultivars varieties and/or hybrids of these

Table 18


Refer to the previous information on soil types under the COARSE MEDIUM and FINE categories
Use higher rates for soils of pH less than 70 and lowest rates for pH greater than 70 within the rate range

## Preplant Applications

F6285 4F CAL Herbicide may be applied preemergence as a broadcast or banded treatment on fruiting vegetables Applications must be made prior to transplant F6285 4F CAL Herbicide can be tankmixed with other burndown or soil applied herbicides labeled for use on tomatoes Use the listed rates of burndown herbicides or split applications as needed Observe all precautions instructions and rotational cropping guidelines of each product $s$ label when tank mixing including all references to potential carryover and crop injury warnings or restrictions

## Preplant Incorporated (PPI)

F6285 4F CAL Herbicide may be applied as a preplant incorporated treatment in the spring prior to transplanting tomatoes Do not incorporate to depths greater than 2 inches F6285 4F CAL Herbicide can be tankmixed with other burndown or soil applied herbicides labeled for use on tomatoes Use the full listed rates of burndown herbicides or split applications as needed Observe all precautions instructions and rotational cropping guidelines of each product s label when tank mixing including all references to potential carryover and crop injury warnings or restrictions
Weeds Controlled
When applied according to directions F6285 4F CAL Herbicide will provide control of

| Lambsquarters common | Pigweed redroot |
| :--- | :--- |
| (Morningglory ivyleaf | Waterhemp common |
| Nutsedge yellow | Waterhemp tall |

## Precautions

These Crop Specific Use directions are based upon the interactive effects of F62854F CAL Herbicide (sulfentrazone) 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 Application Instructions F62854F CAL 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 F6285 4F CAL Herbicide Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F62854F CAL Herbicide under specific local conditions

## Restrictions

Do not apply more than 120 ounces ( 0375 pound active) per acre of F6285 4F CAL Herbicide per application or per twelve month period The twelve month period is considered to begin upon the initial F62854F CAL application

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

## HORSERADISH

Table 19


F6285 4F CAL may be applied as an preplant preemerge or preplant incorporated treatment by ground in a minimum of 15 gallons of finished spray

## Early Preplant (Fall Application or Spring Application)

F6285 4F CAL may be applied in the fall or spring preceding the growing season to control or suppress weeds prior to or up to the planting of horseradish F6285 4F CAL may be applied in the spring from 60 days prior to planting up to planting F6285 4F CAL should be applied to the harvested crop stubble or soil surface without incorporation Moisture in the form of ran or snow will move and activate the product into the soil Do not mechanically incorporate in the fall or spring after application as this may destroy the herbicide barner and weed escapes may occur Do not apply to frozen soils to prevent F62854F CAL runoff from rain or snow that may occur following application F6285 4F CAL may be tankmixed with other burndown herbicides to control emerged weeds in the fall or spring or with residual soil herbicides that are labeled for use on horseradish Use listed rates of burndown herbicides in combination with F6285 4F CAL or split applications as needed Observe all precautions instructions and rotational cropping guidelines of each product label when tank mixing including all references to potential carryover and crop injury warnings or restrictions

## Preplant Incorporated (PPI)

F6285 4F CAL may be applied as a preplant incorporated treatment in the spring prior to planting of horseradish Do not incorporate to depths greater than 2 inches F6285 4F CAL can be tankmixed with other burndown or soil applied herbicides labeled for use on horseradish Use the listed rates of burndown herbicides or split applications as needed Observe all precautions instructions and rotational cropping guidelines of each products label when tank mixing including all references to potential carryover and crop injury warnings or restrictions

## Pre Emergence (PRE)

F6285 4F CAL may be applied pre emergence as a broadcast or banded treatment on horseradish Applications should be made broadcast prior to planting broadcast soon after planting but at least 5 days before crop emergence F62854F CAL may be applied as a banded treatment into the row middles after crop emergence Use the higher F6285 4F CAL rates on clay solls and/or sols with greater than $1 \%$ organic matter F6285 4F CAL may be applied with other pesticides registered for use on horseradish

Weeds Controlled
When applied according to directions F6285 4F CAL will provide control of

| Lambsquarters common | Pigweed redroot |
| :--- | :--- |
| Morningglory ivyleaf | Waterhemp common |
| Nutsedge yellow | Waterhemp tall |

For information on other weeds not listed above refer to Weeds Controlled section (Table 5) in this label

## Precautions

These Crop Specific Use directions are based upon the interactive effects of F62854F CAL (sulfentrazone) and the primary soll 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 Application Instructions F6285 4F CAL 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 F62854F CAL Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL under specific local conditions

## Restrictions

Do not apply more than 80 fluid ounces ( 025 pound active) per acre of F6285 4F CAL per application or per twelve month period The twelve month period is considered to begin upon the initial F6285 4F CAL application
Do not apply directly on the crop after the crop emerges or if the seedling sprouts are close to the soll surface
Do not use on solls classified as sand which have less than $1 \%$ organic matter
Do not incorporate to depths greater than 2 inches

## MELONS

Citron melon muskmelon watermelon
Table 20

| F6285 4F CAL Herbicide Use Rate Table (Melons) |  |  |  |
| :---: | :---: | :---: | :---: |
| Pre emergence Appıcatıons |  |  |  |

Refer to the previous information on soll types under the COARSE MEDIUM and FINE categories
Use higher rates for soils of pH less than 70 and lower rates for pH greater than 70 within the rate range

## Pre emergence

F6285 4F CAL Herbicide can be applied 48 hours prior to planting to anytime after planting but before seedlings have emerged F62854F CAL Herbicide applied after crop emergence may cause severe injury to the crop F62854F CAL Herbicide can be applied alone or in combination with other labeled melon herbicides F62854F CAL Herbicide may be followed by labeled postemergence melon herbicides for increased control of grass and broadleaf weeds Always follow the most restrictive label when tank mixing When using F6285 4F CAL Herbicide in no till or minimum till cropping systems tank mix with an appropriate burndown herbicide for improved control of existing weeds

## Weeds Controlled

When applied according to directions F6285 4F CAL Herbicide will provide control of

| Lambsquarters common | Pigweed redroot |
| :--- | :--- |
| Morningglory ivyleaf | Waterhemp common |
| Nutsedge yellow | Waterhemp tall |

## Precautions

These Crop Specific Use directions are based upon the interactive effects of F62854F CAL Herbicide (sulfentrazone) 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 Application Instructions F6285 4F CAL 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 F6285 4F CAL Herbicide Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL Herbicide under specific local conditions

## Restrictions

Do not apply more than 80 ounces ( 025 pound active) per acre of F62854F CAL Herbicide per application or per twelve month period The twelve month period is considered to begin upon the initial F62854F CAL application
Do not apply directly on the crop after the crop emerges or if the seedling sprouts are close to the soil surface
Do not use on soils classified as sand which have less than $1 \%$ organic matter

## STRAWBERRY

Table 21


## Preemergence

F6285 4F CAL Herbicide can be applied prior to planting and before seedlings have emerged F6285 4F CAL Herbicide applied after crop emergence may cause severe injury to the crop F62854F CAL Herbicide can be applied alone or in combination with other labeled strawberry herbicides F6285 4F CAL Herbicide may be followed by labeled postemergence strawberry herbicides for increased control of grass and broadleaf weeds Always follow the most restrictive label when tank mixing When using F62854F CAL Herbicide in no till or minimum till cropping systems tank mix with an appropriate burndown herbicide for improved control of existing weeds

Weeds Controlled
When applied according to directions F6285 4F CAL Herbicide will provide control of

| Corn spurry | Pineapple weed |
| :--- | :--- |
| Field Pansy | Prostrate knotweed |
| Groundsel common | Sheperdspurse |
| Ladysthumb | Waterhemp common |
| Lambsquarters common | Waterhemp tall |
| Mayweed | White Campion |
| Morningglory ivyleaf | Wild buckwheat |
| Nutsedge yellow | Yellow nutsedge |
| Pigweed redroot | Yellow woodsorrel |

## Precautions

These Crop Specific Use directions are based upon the interactive effects of F6285 4F CAL Herbicide (sulfentrazone) 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 Application Instructions F6285 4F CAL 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 F6285 4F CAL Herbicide Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL Herbicide under specific local conditions

## Restrictions

Do not apply more than 12 ounces ( 0375 pound active) per acre of F62854F CAL Herbicide per application or per twelve month period The twelve month period is considered to begin upon the initial F6285 4F CAL application

Do not apply directly on the crop after the crop emerges or if the seeding sprouts are close to the soll surface

## SUCCULENT PEAS (37 0)

Cajanus cajan (includes pigeon pea) Cicer spp (includes chickpea and garbanzo bean) Lens cultnans (lentil) Pisum spp (includes dwarf pea garden pea green pea English pea field pea and edible pod pea)

Table 18

| F6285 4F CAL Herbicıde Use Rate Table (Succulent Peas) <br> Preemergence Applications |  |  |  |
| :---: | :---: | :---: | :---: |
| Broadcast Rate | Fluid Ounces F6285 4F CAL Herbicide per acre |  |  |
|  | Soll Texture |  |  |
| \% Organıc Matter | Coarse | Medium | Fine |
| <15 | 225-375 | 30-60 | 375-60 |
| 15-30 | 30-45 | 375-60 | 45-60 |
| $>30$ | 375-60 | 45-60 | 525-60 |

Refer to the previous information on soll types under the COARSE MEDIUM and FINE categories
Use higher rates for soils of pH less than 70 and lower rates for pH greater than 70 within the rate range

## Preemergence (37 1)

F6285 4F CAL Herbicide may be applied to succulent peas as a preemergence treatment at 60 fluid ounces ( 01875 pounds active) per acre Applications should be made with ground equipment in a minimum of 10 gallons of finished spray per acre
Weeds Controlled

| When applied according to directions F6285 4F CAL Herbicide will provide control of |  |
| :--- | :--- |
| Copperleaf hophornbeam | PIgweed redroot |
| Morningglory entreleaf | PIgweed smooth |
| Morningglory ivyleaf |  |

## Precautions

When applying F6285 4F CAL Herbicide to coarse textured solls it is recommended that growers allow a minimum of 714 days from application to planting Best results are achieved with F62854F CAL Herbicide when applications are made early preplant and greater than 14 days before planting
Under extended periods of dry weather adequate weed control may not be achieved
Some adverse crop response may occur on coarse textured soils with low organic matter (less than $15 \%$ ) and pH of 78 or higher or on highly eroded soils or in areas of calcareous outcroppings F6285 4F CAL Herbicide use rates should be reduced in those areas If applying F62854F CAL to course textured solls with less than $15 \%$ organic matter watt a minmum of 7 days after application before planting Inadequate seed furrow closure or shallow planting (less than 10 inch) may result in undesirable crop response As expected poor growing conditions such as excessive moisture low temperatures soll compaction and diseases may also cause undesirable crop response

These Crop Specific Use directions are based upon the interactive effects of F62854F CAL Herbicide (sulfentrazone) 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 instructoons and guidance previously presented under Application Instructions F6285 4F CAL 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 F6285 4F CAL Herbicide Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F62854F CAL Herbicide under specific local conditions

## Restrictions

Do not apply more than 6 ounces ( 01875 pound active) per twelve month period The twelve month period is considered to begin upon the intial F6285 4F CAL Herbicide application

Do not apply to coarse soils classified as sand which have less than $1 \%$ organic matter
Do not incorporate

## OIL CROPS FLAX (38 0)

Table 23

| F6285 4F CAL Herbicide Use Rate Table (Flax) <br> Fall Early Preplant and Preemergence Applications |  |  |  |
| :---: | :---: | :---: | :---: |
| Broadcast Rate | Fluid Ounces F6285 4F CAL Herbicide per acre |  |  |
| \% Organic <br> Matter | Coarse | Soil Texture |  |
| $<15 \%$ | $225-30$ | $30-45$ | $30-60$ |
| $15-30 \%$ | $30-60$ | $60-90$ | $60-90$ |
| $>30 \%$ | $60-90$ | $60-120$ | $60-120$ |
| Refer to the previous information on soil types under the COARSE <br> MEDIUM and FINE categories <br> Use higher rates for soils of pH less than 70 and lowest rates for pH <br> greater than 70 minn the rate range |  |  |  |

## Fall Applications

F6285 4F CAL Herbicide may be applied in the fall as a preplan treatment to control or suppress weeds prior to planting flax the following spring F6285 4F CAL Herbicide should be applied to the stubble or soil surface and allow moisture from rainfall or snow to move the product into the soil Do not mechanically incorporate in the fall or spring as this can destroy the herbicide barrier and allow weed escapes to occur Do not apply to frozen sols or to existing snow cover to prevent F62854F CAL Herbicide runoff from rain or snow melt that may occur following application If weeds are emerged at the time of F62854F CAL Herbicide application use a labeled burndown herbicide at the full labeled rate in combination with F6285 4F CAL Herbicide or a sequential application as needed Select the appropriate rate from the Table above within the correct soil type and organic matter range When applying F6285 4F CAL Herbicide in the fall use a mid to high rate within the rate range for the appropriate soil type and organic matter

## Early Preplant and Preemergence (Spring Applications)

F6285 4F CAL Herbicide may be applied preplan on the soil surface in the spring to control weeds in flax F6285 4F CAL Herbicide can be applied early preplant prior to planting up to 3 days after planting as a preemerge soil application if seedlings have not broken the soil surface and if the seed furrow is completely closed F6285 4F CAL Herbicide applied after crop emergence may cause severe injury to the crop For preemerge applications greater than 3 weeks prior to planting use the mid to high rate within the appropriate rate range for the soil and organic matter type listed in the use rate chart above F62854F CAL Herbicide can be applied alone or in combination with other labeled flax herbicides Always follow the most restrictive label when tank mixing F62854F CAL Herbicide may be followed by labeled postemergence flax herbicides for increased control of grass and broadleaf weeds If dry conditions persist following preemerge application of F62854F CAL Herbicide weed control may be poor If weeds are emerged at the time of F6285 4F CAL Herbicide application use a burndown herbicide at the full labeled rate in combination with F6285 4F CAL Herbicide or split application as needed When using F6285 4F CAL Herbicide in no till or minimum till cropping systems tank mix with an appropriate burndown herbicide for improved control of existing weeds

## Preemergence

F6285 4F CAL Herbicide can be applied prior to planting to anytime after planting but before seedlings have emerged F62854F CAL Herbicide applied after crop emergence may cause severe injury to the crop F62854F CAL Herbicide can be applied alone or in combination with other labeled flax herbicides F6285 4F CAL Herbicide may be followed by labeled postemergence flax herbicides for increased control of grass and broadleaf weeds Always follow the most restrictive label when tank mixing When using F6285 4F CAL Herbicide in no till or minimum till cropping systems tank mix with an appropriate burndown herbicide for improved control of existing weeds

When applied according to directions F6285 4F CAL Herbicide will provide control of

| Copperleaf hophornbeam | Morningglory tall |
| :--- | :--- |
| Kochıa (ALS and Triazine <br> Resistant) | Nightshade Eastern black |
| Morningglory entireleaf | Pigweed redroot |
| Morningglory ivyleaf | Pigweed smooth |

## Precautions

When applying F62854F CAL Herbicide to coarse textured soils growers are to allow a minimum of 714 days from application to planting Some adverse crop response may occur on coarse textured soils with low organic matter (less than $15 \%$ ) and pH of 72 or higher or on highly eroded soils hilltops or in areas of calcareous outcroppings F6285 4F CAL Herbicide use rates should be reduced to $30 \mathrm{oz} / \mathrm{A}$ in those areas or F6285 4F CAL Herbicide should not be used in those areas Inadequate seed furrow closure or shallow planting (less than 10 inch ) may result in undesirable crop response As expected 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 F62854F CAL Herbicide (sulfentrazone) 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 Application Instructions F6285 4F CAL 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 F6285 4F CAL Herbicide Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL Herbicide under specific local conditions

## Restrictions

Do not apply more than 12 ounces ( 0375 pound active) per acre of F6285 4F CAL Herbicide per application or per twelve month period The twelve month period is considered to begin upon the initial F62854F CAL application
Do not apply to frozen soils or existing snow cover to prevent F62854F CAL Herbicide runoff from rain or snowmelt that may occur following application
Do not use on soils classified as sand which have less than $1 \%$ organic matter
Do not incorporate greater than 2 inches deep
Do not apply directly on the crop after the crop emerges or if the seedling sprouts are close to the soil surface
MINT
Table 24

| F6285 4F CAL Use Rate Table (Mint) <br> For Dormant and New Planting Applications |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Broadcast Rate | Fluid Ounces F6285 4F CAL per acre |  |  |  |
|  | Sol Texture |  |  |  |
| $\%$ Organic Matter | Coarse | Medium | Fine |  |
| $<15 \%$ | $45-60$ | $60-80$ | 80 |  |
| $1530 \%$ | $60-80$ | $80-101$ | 101 |  |
| $>30 \%$ | $80-101$ | $101-120$ | 120 |  |

Refer to the previous information on soil types under the COARSE MEDIUM and FINE categories
Use higher rates for soils of pH less than 70 and lower rates for pH greater than 70 within the rate range

## Dormant Applications

Apply F6285 4F CAL to established stands of dormant mint after post harvest and/or spring land cultivation has been completed and before emergence of new mint growth
Split applications of F62854F CAL may be used for preemergence sequential control of winter annuals and summer annuals Fall applications must be applied after post harvest cultivation has been completed and spring application made after spring cultivation has been completed and before emergence of new mint growth
Apply F6285 4F CAL in tank mixtures with a registered burndown herbicide to control emerged weeds at the time of application A surfactant is recommended with these tank mixtures to improve control of the emerged weeds
F6285 4F CAL may also be applied in tank mixtures with other products registered for use in mint

## New Planting Applications

F6285 4F CAL may be applied to new mint plantings preemergence to the weeds and mint The rate of application should be reduced approximately twenty five percent of the rate listed for established plantings for particular soil characteristics Refer to F6285 4F CAL Use Rate Table (Table 24) for the appropriate use rate for the soil type and organic matter content The higher rates in the range are recommended for souls of pH less than 70

When Applied according to directions F6285 4F CAL will provide control of

| Amaranth Powell | Nutsedge yellow |
| :--- | :--- |
| Bedstraw catchweed | Pigweed redroot |
| Chamomile mayweed | Sheperdspurse |
| Kochia (ALS and Triazine Resistant) | Toadflax yellow |
| Lambsquarters common | Thistle Russian |
| Morningglory ivyleaf | Waterhemp common |
| Nightshade Eastern black | Waterhemp tall |

For information on other weeds not listed above refer to Weeds Controlled section (Table 5) in this label

## Precautions

Applications made to mint that has emerged will result in severe injury to exposed plant tissue
Apply only to healthy mint fields Applications to mint under stress from disease pests and cultural or environmental conditions may result in crop injury
Moisture in the form of rainfall or overhead irrigation is required after application to activate the herbicide
These Crop Specific Use directions are based upon the interactive effects of F62854F CAL (sulfentrazone) 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 Application Instructions F62854F CAL 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 F62854F CAL Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL under specific local conditions

## Restrictions

Apply F6285 4F CAL only to dormant mint or new mint plantings before new growth emerges
Do not use on sols classified as sand which have less than $1 \%$ organic matter
Do not apply more than 12 fluid ounces (0 375 pound active) per twelve month period The twelve month period is considered to begin upon the initial F6285 4F CAL application

## PERMANENT CROPS

## CITRUS FRUIT, TREE NUTS, GRAPES and BERRIES

Citrus Fruits (Crop Group 10) Australian desert lime Australian finger lime Australian round lime Brown River finger lime calamondin citron citrus hybrids grapefruit Japanese summer grapefruit kumquat lemon lime Mediterranean mandarin mount white lime New Guinea wild lime orange sour orange sweet pomelo Russell River lime satsuma mandarin sweet lime tachibana orange Tahiti lime tangelo tangerine (mandarin) bangor trifoliate orange uniq fruit cultivars varieties and/or hybrids of these

## Preharvest Interval 3 days

Grapes Wine Rain Table and Juice Amur river grape
Preharvest Interval 3 days
Berries (Crop Group 1307 ) aronia berry bayberry bearberry bilberry blackberry (including Andean blackberry arctic blackberry bingleberry black satin berry boysenberry brombeere California blackberry Chesterberry Cherokee blackberry Cheyenne blackberry common blackberry coryberry darrowberry dewberry Dirksen hornless berry evergreen blackberry Himalayaberry huliberry lavacaberry loganberry lowberry Lucretiaberry mammoth blackberry marionberry mora mures deronce nectarberry Northern dewberry olallieberry Orgeon evergreen berry phenomenalberry rangeberry ravenberry rossberry Shawnee blackberry Southern dewberry tayberry youngberry zarzamora and cultivars varieties and/or hybrids of these) blueberry highbush blueberry lowbush buffalo currant buffaloberry che Chilean guava chokecherry cloudberry cranberry cranberry highbush currant black currant red elderberry European barberry gooseberry honeysuckle edible huckleberry jostaberry Juneberry (Saskatoon berry) kiwifruit fuzzy kiwifruit hardy lingonberry maypop mountain pepper berries mulberry muntries native currant partridgeberry phalsa pincherry raspberry black and red riberry salal schisandra berry sea buckthorn serviceberry wild raspberry cultivars varieties and/or hybrids of these

Preharvest interval 3 days
Tree Nuts (Crop Group 14) Almond Beech Nut Brazil Nut Butternut Cashew Chestnut Chinquapin Filbert (Hazelnut) Hickory Nut Macadamia Nut (Bush Nut) Pecan Pistachio and Walnut (Black and English)

Preharvest Interval 3 days

## APPLICATION INFORMATION

F6285 4F CAL should be applied as a uniform broadcast soil application to orchard and vineyard floors and to berry beds and furrows or as a uniform band application directed to the base of the trunk in trees and vines and to the base of the berry and beds in berry s to provide preemergence control of weeds in Table 23

For best control F6285 4F CAL should be applied when there are no weeds present or a postemergence herbicide is tank mixed to eliminate emerged weeds

For broadcast applications a single application of F6285 4F CAL should be made at 4 to12 fl oz per acre ( 0125 to 0375 lb al /A) Do not apply more than 12 fluid ounces ( 0375 lb al) per acre per twelve month period The twelve month period is considered to begin when the initial application of F6285 4F CAL is applied

For improved weed management F6285 4F CAL can be applied in a tank mixture with other preemergence and postemergence burndown herbicides Refer to the tank mix partner s labels for additional restrictions including minimum spray volumes and crops in which they are labeled Burndown herbicides may include but are not limited to Alum Shark Rage D Tech glyphosate paraquat Rely and 24 D Do not tank mix with Chateau (B) herbicides (flumioxazin) or with other products containing sulfentrazone

When applied as a banded treatment ( $50 \%$ band or less) refer to formula in chart below for rate and volume F6285 4F CAL may be applied twice per year Do not apply more than $12 \mathrm{fl} \mathrm{oz} \mathrm{product} \mathrm{per} \mathrm{acre} \mathrm{( } 0375 \mathrm{lb}$ aidA) on a broadcast application basis per year Allow a minimum of 60 days between applications unless otherwise specified on the label or separate published FMC recommendations

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

| Band Width Feet | $x$ | Broadcast <br> Rate Per Acre | $=$ | Band Rate |
| :--- | :--- | :--- | :--- | :--- |
| Row Width Feet |  |  |  |  |
|  |  | $=$ | Band Volume |  |
| Band Width Feet | $x$ | Broadcast <br> Volume Per Acre |  |  |

A minimum of 10 gallons of spray solution per acre should be used to ensure uniform spray coverage Nozzle selection should meet manufacturers spray volume and pressure recommendations for preemergence and postemergence herbicide applications The spray solution should have a pH between 50 and 90

F62854F CAL should only be applied to crops that have been established for one full growing season and are in good health and vigor Avoid contact of the spray solution on the green bark of trunks of young vines and trees by wrapping the trunk with a nonporous wrap grow tubes or wax containers which will keep the spray solution from coming in direct contact with the green tissue Avoid direct or indirect spray contact with crop foliage and fruit

Use ground equipment only do not apply using an airblast sprayer or by air
Best results are obtained when the soil is moist at the time of application and the application will be followed by at least $1 / 2$ inch of rainfall or sprinkler irrigation within two weeks after application Applications should be timed to take advantage of normal rainfall patterns and cool temperatures especially where drip or micro sprinkler irrigation is used which may not uniformly incorporate the herbicide

## WEED CONTROL INFORMATION

F6285 4F CAL is a selective soil applied herbicide for the control of susceptible broadleaf grass and sedge weeds found in Tables 23 and 24 Adequate moisture of at least $1 / 2$ inch is required within 14 days after application for optimal control If adequate rainfall is not received in a timely fashion irrigate with a minimum of $1 / 2$ inch of water When activating moisture is delayed a reduced level of weed control may occur These escaped weeds can be removed using a burndown herbicide

Tank mix F6285 4F CAL with a burndown herbicide and use an appropriate adjuvant when weeds are present at the time of application Refer to the tank mix partners product label for the proper use rates by weed sizes Use the most restrictive label limitations and precautions of the tank mix products)

Residual weed control may be reduced when F6285 4F CAL is applied where heavy crop trash such as leaves and branches and for weed residues exists It is best to rake or blow off the leaves and trash when they fall and prior to the F6285 4F CAL application

Do not apply after petal fall unless using a hooded or shielded sprayer to ensure that the spray solution will not come in contact with the crop or foliage

## Permanent Crop Weed List

| Common Name | Scientific Name |
| :--- | :--- |
| Amaranth livid | Amaranthus Iividus |
| Amaranth Palmer | Amaranthus palmen |
| Amaranth Powell | Amaranthus Powell II |
| Amaranth spiny | Amaranthus spinosus |
| Amaranth spleen | Amaranthus dubius |
| Anoda spurred | Anoda cnstata |
| Barnyardgrass common | Echinochloa crus gall ı |
| Bedstraw catchweed | Gallium apanne |
| Bindweed field | Convolvulus arvensis |
| Bluegrass annual | Poa annua |
| Bromegrass species | Bromus spp |
| Burclover California | Medicago polymorpha |
| Carpetweed | Mollugo vertıillata |
| Cheatgrass | Bromus tectorum |
| Cheeseweed species | Malva spp |
| Chickweed common | Stellana media |
| Clover species | Trifolium spp |
| Copperleaf hophornbeam | Acalypha ostryeafolia |
| Copperleaf Virginia | Acalypha virginica |
| Crabgrass large | Digitana sanguinalis |


| Crabgrass smooth | Digitana ischaemum |
| :---: | :---: |
| Crabgrass Southern | Digitana cilians |
| Croton tropic | Croton glandulosus |
| Crownbeard golden | Verbesina enceliordes |
| Cupgrass wooly | Enchloa villosa |
| Cyperus hedgehog | Cyperus compressus |
| Dassy American | Eclipta alba |
| Devilsclaw | Proboscidea loulsiana |
| Dock curly | Rumex cnspus |
| Eclipta | Eclipta prostrata |
| Eveningprimrose cutleaf | Oenothera laciniata |
| Fescue Red | Fetuca rubra |
| Fiddleneck speicies | Amsinckia spp |
| Filaree broadleaf | Erodurm botrys |
| Filaree redstem | Erodium cicutanum |
| Filaree whitestem | Erodium moschatum |
| Fleabane hairy | Conyza bonanensis |
| Flixweed | Descuramia sophia |
| Foxtall bristly | Setan verticillata |
| Foxtall giant | Setana faben |
| Foxtall green | Setana vindıs |
| Foxtall yellow | Setana glauca |
| Galinsoga haıry | Galinsoga cillata |
| Goosegrass | Eleusine indica |
| Goosefoot nettleleaf | Chenopodium murale |
| Groundcherry clammy (seedling) | Physalis heterophylla |
| Groundcherry cutleaf | Physalis angulata |
| Groundsel common | Senecio vulgans |
| Henbit | Lamium amplexicaule |
| Horseweed (Marestail) | Conyza canadensis |
| Ryegrass Italian | Lolium multiflorum |
| Jimsonweed | Datura stramonium |
| Johnsongrass | Sorghum halpense |
| Junglerice | Enchinochloa colona |
| Knotweed common | Polygonum arenastrum |
| Kochia (ALS and Triazine Resistant) | Kochia scopana |
| Ladysthumb | Polygonum persicaria |
| Lambsquarters common | Chenopodıum album |
| Lettuce miners | Montia perfoliata |
| Lovegrass species | Eragrostıs spp |
| Mallow common | Malva neglecta wall r |
| Mallow little | Malva parviflora |
| Mayweed Chamomile | Anthemis cotula I |
| Milkweed honeyvine | Ampelamus albidus |
| Morningglory entureleaf | Ipomoea hederacea integriuscula |
| Morningglory ivyleaf | Ipomoea hederacea hederacea |
| Morningglory palmleaf | lpomoea wrightu |
| Morningglory purple | Ipomoea turbinata |
| Morningglory red | lpomoea coccinea L |
| Morningglory scarlet | Ipomoea coccinea |
| Morningglory smallflower | Jacquemontia tamnifolia |
| Mornıngglory tall | lpomoea purpurea |
| Mullein turkey | Eremocarpus setigerus |
| Mustard Species | Brassica spp |
| Mustard tumble. | Sisybnum altissimum |
| Nettle burning | Urtica urens |
| Nightshade black | Solanum nigrum |
| Nightshade Eastern black | Solanum ptycanthum |
| Nutsedge purple | Cyperus rotundus |
| Nutsedge yellow | Cyperus esculentus |
| Orchardgrass | Dactylis glomerata |
| Panıcum fall | Panicum dichotomiflorum |
| Pigweed prostrate | Amaranthus blitordes |
| Pigweed redroot | Amaranthus retroflexus |
| Pigweed smooth | Amaranthus hybridus |
| Pigweed Tumble | Amaranthus albus |


| Pineapple weed | Chamomilla suaveolens |
| :---: | :---: |
| Plantan blackseed | Plantago rugellı decne |
| Plantain narrow leaved | Plantago lanceolata |
| Poorjoe | Diodia teres |
| Porophyllum | Porophyllum rederale |
| Poinsettia wid | Euphorbia heterophylla |
| Puncturevine | Tribulus terrestrs |
| Pursiane common | Portulaca oleracea |
| Redmands | Calandnnia ciliata |
| Redweed | Melochia corchorfolia |
| Radish Wild | Raphanus raphanistrum |
| Rocket London | Sisymbrum ino |
| Sandbur | Cenchrus spinifer |
| Sedge annual | Carex spp |
| Senna coffee | Cassia occidentalls |
| Sheperdspurse | Capsella bursa pastors |
| Sida prickly | Sida spinosa |
| Sida Southern | Sida acuta |
| Signalgrass broadleaf | Brachıana platyphylla |
| Smartweed PA (seedling) | Polygonum pensy/vanicum |
| Smellmellon | Cucumis melo |
| Sowthistle species | Sonchus spp |
| Srangletop red | Leptochloa filformis |
| Spurge spotted | Chamaesyce maculate |
| Starbur bristly | Acanthospermum hispidum |
| Stınkgrass | Eragrostis cilianensis |
| Toadflax yellow | Linana vulgans |
| Tassleflower red | Emilio sonchifolia |
| Thistle Russian | Salsola kall |
| Waterhemp common | Amaranthus rudis |
| Waterhemp tall | Amaranthus tuberculatos |
| Waterprimrose wiged | Ludwigra decurrens |
| Willowleaf panicle leaf | Epilobium brachycarpum |
| Witchgrass | Panicum capillare |

ANNUAL AND PERENNIALSEDGE CONTROL INCLUDING NUTSEDGE
F6285 4F CAL applied at 12 fluid ounces per acre ( 0375 lb ai/A) may provide control or suppression of sedges whether applied preemergence or postemergence to the sedges Postemergence applications to sedges allow F62854F CAL to be taken into the sedge through the foliage as well as soll uptake through the roots Soll uptake is the major means of uptake by sedges Good spray coverage is required for optimum control of sedges especially when applying postemergence to the sedges Use a quality nonıonic surfactant (NIC) at the rate of $025 \%$ v/v when applying postemergence

## When applied as directed F6285 4F CAL will provide control or suppression of the following sedges

| Common Name | Scıentıfic Name |
| :--- | :--- |
| Kyllinga green | Kyllinga brevifolia |
| Kullinga false green | Kyllinga gracillima |
| Nutsedge purple | Cyperus rotundus |
| Nutsedge yellow | Cyperus esculentus |
| Sedge cylindrıcal | Cyperus retrorsus |
| Sedge globe | Cyperus globulosus |
| Sedge Surınam | Cyperus sunnamensis |
| Sedge Texas | Cyperus polystachyos |

Optımum control of purple nutsedge may be obtained using split applications of F62854F CAL Apply 46 fluid ounces per acre followed by a second applicatıon to actively growng purple nutsedge Do not exceed the maximum rate of 12 fluid ounces ( 0375 lb ai/A) per season F6285 4F CAL symptoms on purple nutsedge will be observed as reduced nutsedge stands necrosis chlorosis and/or stunting Optımum control may not be observed until the second year after the original treatment

## REPLANTING IN NEW OR ESTABLISHED ORCHARDS AND VINEYARDS

Delay replanting at least 30 days after F62854F CAL applicatıons when replacing trees and vines in newly planted and established orchards and vineyards Use untreated soil when replanting trees and vines

## Precautions

These Crop Specific Use directions are based upon the interactive effects of F62854F CAL (sulfentrazone) 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 Applicatıon Instructions General F6285 4F CAL Product

Use Rates Rotational Crop Guidelınes Replantıng 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 F6285 4F CAL Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL under specific local conditions FMC does not recommend tank mixing this product with other products containing sulfentrazone or other group 14 herbicides as crop injury may occur

## Restrictions

- Do not apply F6285 4F CAL using arblast sprayers or by air Use ground equipment only
- Do not apply more than 12 fluid oz product per acre ( 0375 lb ail $/ \mathrm{A}$ ) per season
- Apply to crops that have been growng for at least one full year and are in good condition
- Avoid direct or indirect spray contact to foliage and green bark (wrap trunk with non porous wrap grow tubes or wax containers to keep spray solution off of green tissue)
- Do not apply to powdery soils or soils where wind may displace the soil unless irrigation can be applied immediately after application
- Follow the most restrictive label of tank mix partners including all references to potential carryover and crop infury warnings and restrictions
- Pre harvest Interval (PHI) 3 days
- If two banded treatments are made in a growing season allow a minımum of 60 days between applications however do not exceed the seasonal maximum use rate


## TURNIPS

Apply 025 lbs active ingredient ( 8 fluid ounces) per acre of sulfentrazone Make one post emergent application at 4660 days before harvest Apply in 1040 gallons of water per acre

Weeds Controlled
When Applied according to directions F6285 4F CAL Herbicide will provide control of

| Galinsoga harry | Waterhemp common |
| :--- | :--- |
| Lambsquarters common | Waterhemp tall |
| Pigweed redroot |  |

For information on other weeds not listed above refer to Weed Controlled section (Table 5) in this label

## Restrictions

Do not apply more than 80 fluid ounces ( 025 pound active) per acre per 12 month period
Do not make more than one F6285 4F CAL Herbicide application per acre per 12 month period The twelve month period is considered to begin upon the initial F6285 4F CAL Herbicide application Do not use on soils classified as sand which have less than $1 \%$ organic matter

## RHUBARB

Apply 025 lbs active ingredient (8 fluid ounces) per acre of sulfentrazone Make one post emergent broadcast application (just prior to rhubarb plants breaking dormancy) at $80(+/ 5)$ days before harvest Use a minımum of 10 gallons of water per acre

## Weeds Controlled

When Applıed accordıng to directıons F6285 4F CAL Herbıcıde will provide control of

| Galınsoga haıry | Waterhemp common |
| :--- | :--- |
| Lambsquarters common | Waterhemp tall |
| Pigweed redroot |  |

For information on other weeds not listed above refer to Weed Controlled section (Table 5) in this label

## Restrictions

Do not apply more than 80 fluid ounces ( 025 pound active) per acre per 12 month period
Do not make more than one F6285 4F CAL Herbicide application per acre per 12 month period The twelve month period is considered to begin upon the initial F6285 4F CAL Herbicide application
Do not use on soils classified as sand which have less than $1 \%$ organic matter

## Turf Grasses

## (Including Residentıal and Instıtutıonal Lawns, Athletıc Fields, Golf Course Faırways and Roughs and Commercial Sod Farms)

F6285 4F CAL Herbicide is a selective preemergence and post emergence herbicide which controls annual grasses and broadleaf weeds in established turf areas including residential and institutional lawns athletic fields commercial sod farms golf course farmays and golf course roughs To broaden the spectrum for preemergence control or suppression of annual grasses and/or broadleaf weeds F6285 4F CAL Herbicide should 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 F6285 4F CAL Herbicide F6285 4F CAL may be applied to established seeded sodded or sprigged turfgrasses following the second mowng for the control of key grass sedge and broadleaf weeds Turf grasses should have developed a good root system a uniform stand with healthy root systems to fill in the exposed edges prior to application Turf injury could result from application of this product on turf that is not well established or has been weakened by stresses such as unfavorable weather conditions diseases chemical recent harvesting or mechanical influences
F6285 4F CAL Herbicide is formulated as a flowable (suspension concentrate) containing 4 lbs of active ingredient per gallon The mode of action of F6285 4F CAL Herbicide involves uptake by both weed roots and shoots Preemergence application of F62854F CAL 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 soll texture The most effective preemergence weed control will be obtained when F6285 4F CAL Herbicide is activated by at least 05 inches of rainfall or irrigation within 7 days after application and prior to weed seed germination

Turf Grass Tolerance
When applied as directed the following established turf grasses are tolerant to F6285 4F CAL herbicide at the listed use rates
Table 25 Tolerant grasses

| Grass Type | Maximum Use Rate * For Single Application |  |
| :---: | :---: | :---: |
| Cool Season Grasses | Fluid Ounces F6285 4F CAL Per Acre | Pound Active Ingredient Per Acre |
| Bentgrass creeping | 4 | 0125 |
| Fescue fine (Festuca rubra) <br> Fescue tall (Festuca arundinacea) <br> Ryegrass perennial (Lolium perenne <br> Bluegrass Kentucky (Poa pratensis) <br> Bluegrass Rough (Poa trivialis) | 48 | 0125025 |
| Warm Season Grasses * |  |  |
| Bahıagrass (Paspalum notatum) <br> Buffalograss (Buchloe dactyloides) <br> Carpetgrass (Axonopus affinis) <br> Centipedegrass (Eremochloa <br> ophuioides) <br> Kıkuyugrass (Pennisetum <br> clandestınum) <br> Seashore Paspalum (Paspalum vaginatum) <br> Zoysiagrass (Zoysia japonica) <br> Bermudagrass (Cynadon dactylon) <br> Bermudagrass Hybrids (Cyn Bluegrass <br> St Augustnegrass (Stenotaphrum secundatum) | 812 | 0250375 |

Applicatıons of F6285 4F CAL to certain varieties of Chewings Fine Fescue or Tall Fescue may result in undesirable plant response

It is important to note that not all varieties or cultivars have been evaluated under treatment with F6285 4F CAL Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL. under specific local conditions

Do not apply more than 12 fluid ounces ( 0375 pound active) per acre of F62854F CAL Herbicide per twelve month period The twelve month period is considered to begin upon the initial F6285 4F CAL Herbicide application

## Applications to Reseeded Overseeded or Sprigged Areas

Reseeding overseeding or sprigging may be done following F62854F CAL applicatıons to turfgrasses If reseeding overseeding or sprigging is done within 1 month following a F62854F CAL treatment the establishment of desirable grasses may be inhibited Overseeding of bermudagrass wth perennial ryegrass may be done two (2) to four (4) weeks followng a F6285 4F CAL application provided slight grass plant response can be tolerated
Optımum reseeding and overseeding results may be obtained with the use of mechanical or power seeding equipment and where proper soil cultivation irrigation and fertilization practices are followed
Adjuvant use

Good spray coverage is required for optimum control of weeds Temporary discoloration of some sod species may result from use of surfactant Use of surfactants is not recommended
Postemergence Control of Sedges
F6285 4F CAL may be applied at the rate of four (4) to twelve (12) fluid ounces per acre to established turf grasses for the control or suppression of sedges Select the correct F62854F CAL use rate from Table 25
When applied as directed F6285 4F CAL will provide control or supp

| Common Name | Scientific Name |
| :--- | :--- |
| Kyilinga green | Kyllinga brevifolia |
| Kyllinga false green | Kyllinga gracillima |
| Nutsedge purple | Cyperus rotundus |
| Nutsedge yellow | Cyperus esculentus |
| Sedge cylindrical | Cyperus retrorsus |
| Sedge globe | Cyperus globulosus |
| Sedge Surinam | Cyperus sunnamensis |
| Sedge Texas | Cyperus polystachyos |

Purple nutsedge For optimum control of purple nutsedge spit applications are listed below Apply 48 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 the turf variety as listed in Table 25 tolerant grasses
Split Application Rates for Optimum Purple Nutsedge Control

| Grass Type | First Application <br> (fl ozs per acre) | Second Application <br> (fl ozs per acre |
| :--- | :--- | :--- |
| Cool Season Grasses | 24 fl ounces | 26 fl ounces |
| Warm Season Grasses | 46 fl ounces | 46 fl ounces |

Allow 35 days after first application for second application
Postemergence Control of Grassy Weeds
F6285 4F CAL will control or suppress specific annual grasses when applied at a rate of 4 to 12 fl oz/acre Apply the highest rate consistent with the rate needed for turfgrass tolerance in Table 25 Rates lower than 12 fl oz/acre will generally control grasses for at least 60 days F62854F CAL works best if applied when the annual grasses are small (pret tiller stage) and actively growing

| Common Name | Scientific Name |
| :--- | :--- |
| Goosegrass | Eleusine indica |

## Postemergence Control of Broadleaf Weeds

F6285 4F CAL herbicide will control or suppress the weeds listed in the broadleaf chart below when applied alone shortly after weeds have emerged F62854F CAL may be applied at the rate of four (4) to twelve (12) fluid ounces per acre to established turf grasses for the control or suppression of broadleaf weeds Select the correct F6285 4F CAL use rate from Table 25 For optimum results F6285 4F CAL applications should be made shortly after weeds have emerged
F6285 4F CAL may be tankmixed with other herbicides insecticides and fungicides registered for use on turfgrasses Read and follow the label recommendations of the tank mix partner to determine turfgrass species tolerance use rates and application requirements Follow all label restrictions use directions and precautionary statements before use
When applied as directed F6285 4F CAL will provide control or suppression of the following broadleaf weeds

| Broadleaves | Scientific Names |
| :--- | :--- |
| Bittercress | Cardamine spp |
| Black Medic | Medicago lupulina |
| Buttercup | Ranunculus spp |
| Carolina geranium | Geranium carolinianum |
| Carpetweed | Mollugo verticillata |
| Chickweed common | Stellarna media |
| Chickweed mousear | Cerastium vulgatum |
| Cinquefoil | Potentilla spp |
| Clover | Tnfolium spp |
| Cudweed | Gnaphalum spp |
| Dandelion | Taraxacum officinale |
| Dock curly | Rumex crnspus |
| Evening primrose | Oenothera biennis |
| Fiddleneck | Amsinckia spp |
| Filaree | Erodium spp |
| Garlic wild | Allium vineale |
| Goldenrod | Solidago spp |
| Ground ivy | Glechema hederasea |
| Henbit | Lamium amplexicaule |
| Knotweed prostrate | Polygonum aviculare |
| Kochia | Kochia scopana |
| Lambsquarters common | Chenopodium album |
| Lawn burweed | Soliva pterosperma |
| Lespedeza common | Lespedeza strata |
| Mallow common | Maia neglecta |
| Onion wild | Allium canadense |


| Parsley piert | Alchemilla anvensis |
| :--- | :--- |
| Pigweed redroot | Amaranthus retroflexus |
| Pigweed tumble | Amaranthus albus |
| Pineapple weed | Matncana matncanodes |
| Plantain buckhorn | Plantago lanceolata |
| Puncture weed | Tribulus terrestris |
| Purslane common | Portulaca oleracea |
| Pusley Florida | Richardia scabra |
| Redweed | Melochia corchonfolia |
| Rocket London | Sisymbrium imo |
| Smartweed PA | Polygonum pensylvanicum |
| Sorrel red | Rumex acetosella |
| Speedwell | Veronica spp |
| Spurge annual | Euphorbia spp |
| Spurge prostrate | Euphorbia humistrata |
| Spurge spotted | Euphorbia maculata |
| Star of Bethlehem | Omithogalum umbellatum |
| Velvetleaf | Abutlon theophrasti |
| Violet wild | Viola pratincola |
| Woodsorrel creeping | Oxalis comiculata |
| Woodsorrel yellow | Oxalls stricta |

## Restrictions

Do not apply more than 12 fluid ounces ( 0375 pound active) per acre of F6285 4F CAL Herbicide per twelve month period The twelve month period is considered to begin upon the initial F6285 4F CAL Herbicide application
Sod production areas must be established three (3) months prior to the initial treatment of F6285 4F CAL
Do not apply F6285 4F CAL to turf grasses not listed on this label
Do not apply with surfactants
Do not graze or feed forage harvested from F6285 4F CAL treated areas
Do not apply to landscape ornamental plants or ornamental beds
Do not apply to golf course putting greens or tees
Do not harvest sod within three (3) months of F62854F CAL application

## Non-CROP USES

For Use in Railroad, Highway, Roadside, Pipelıne and Utılity Rıghts of-Way, Industrial Areas, Fence Rows, and Other listed Non-crop Sites

## APPLICATION INSTRUCTIONS

Utilize a boomless application system or a boom and nozzle sprayer equipped with the appropriate nozzles spray tips and screens and adjusted to provide optımum spray distribution and coverage at the appropriate operating pressures Utilize nozzles and boomless sprayer configurations which produce minimal amounts of fine spray droplets Do not exceed 25 psi spray pressure unless otherwise required by the manufacturer of drift reducing nozzles or boomless application systems Apply a minımum of 10 gallons of finished spray per acre
Water must be used as the carrier for this product when applied alone or when tank mixed wth other herbicides
Avoid letting this product sit overnight as settling of product and difficulty of resuspending may occur Avoid spray drift to non target areas

## Railroad Rights of Way

F6285 4F CAL Herbicide can be used to control many weeds and maintain bare ground on railroad rights of way including railroad yards railroad crossings and ralload bridge abutments

## Highway, Roadsıde, Pipeline and Utılity Rights-of Way

F6285 4F CAL 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

F6285 4F CAL Herbicide controls weeds and maintains bare ground in industrial areas including production facilities tank farms storage areas parking areas lumber yards airports military installations and along fence rows 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 8 to 12 fluid ounces ( 025 to 0375 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 F6285 4F CAL Herbicide to soils classified as sand with less than $1 \%$ Organic Matter

Use labeled rates of burndown herbicides such as glyphosate glyphosate trimesium diquat 24 D dicamba etc as tank mixtures with F6285 4F CAL 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 all label precautions instructions and rotational cropping restrictions

## Timing

For best results apply F6285 4F CAL Herbicide alone or in combination with other herbicides for residual control of weeds in late summer fall or early spring to insure adequate moisture for soll activation

## Weeds Controlled

This product when applied at 8 to 12 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 |  |
| :---: | :---: |
| Common Name | Scientıfic Name |
| Beggarweed Florida | Desmodium tortuosum |
| Carpetweed | Mollugo verticillata |
| Chickweed common | Stellarıa medıa |
| Copperleaf Hophornbeam | Acalypha ostryıfolia |
| Crabgrass species | Digitaria spp |
| Croton tropic | Croton glandulosus |
| Daisy American | Coreopsis grandiflora |
| Dayflower common | Commelina communis |
| Dayflower Virgınıa | Commelina virginica |
| Dock curly | Rumex crispus |
| Fixweed | Descurainia Sophia |
| Galınsoga haıry | Galınsoga cllıata |
| Groundcherry clammy (seedling) | Physallis heterophylla |
| Groundcherry cutleaf | Physalis angulata |
| Jimsonweed | Datura stramonıum |
| Kochıa | Kochia scoparia |
| ALS/Triazene Resistant Kochia | Kochıa scoparia |
| Lambsquarter common | Chenopodıum album |
| Lettuce wild | Lactuca virosa |
| Mallow common | Malva neglecta |
| Milkweed honeyvine | Ampelamus albidus |
| Mexicanweed | Caperonıa 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 |
| Pıgweed redroot | Amaranthus retroflexus |
| Texasweed | Caperonia palustrus |
| Thistle Russian | Salsola iberica |
| Waterhemp tall | Amaranthus tuberculatus |
| Waterhemp common | Amaranthus rudis |

## Restrictions

Do not apply more than 12 fluid ounces ( 0375 pound active) per acre of F6285 4F CAL Herbicide per twelve month period The twelve month period is considered to begin upon the initial F6285 4F CAL Herbicide application Do not apply by air with the exception of railroad rights of way which can be made by helicopter
Do not graze or feed forage harvested from F6285 4F CAL treated areas
Do not apply to landscape ornamental plants or ornamental beds

## LABEL TRACKING INFORMATION

Label Code 072312

## FMC Corporation

Agricultural Products Group
1735 Market Street
Philadelphia PennsyIvanıa 19103
2152996000

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## Supplemental Labeling

## F6285 4F CAL HERBICIDE

EPA Reg No 279-3370
This supplemental label expires July 312015 and must not be used or distributed after this date

## DIRECTIONS FOR USE

## IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING ALL APPLICABLE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS ON THE EPA REGISTERED LABEL ARE TO BE FOLLOWED

This Supplemental labeling must be in the possession of the user at the time of pesticide application Read the label affixed to the container for before applying Carefully follow all precautionary statements and application use directions Use of F6285 4F CAL HERBICIDE according to this labeling is subject to the use precautions and limitations imposed by the label affixed to the container for F6285 4F CAL HERBICIDE

## CROP ROTATIONAL RESTRICTIONS

The following Table 4 shows the minimum interval in months from the time of the last F6285 4F CAL application until F6285 4F CAL treated soil can be replanted to the crops listed When F62854F CAL is tank mixed with another herbicide refer to the partner label for recropping instructions following the directions that are most restrictive
For all other crops not listed below the rotational interval is a minimum of 12 months Some crops have rotational intervals greater than 12 months after a F62854F CAL 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 sulfentrazone

CROP ROTATIONAL RESTRICTIONS**

| Table 4 | Interval (Months) |
| :--- | :--- |
| Crop | 12 |
| Alfalfa | Anytime |
| Asparagus | 4 |
| Barley | Anytıme |
| Berries | Anytıme |
| Brassica head and stem (Broccoli <br> and Cabbage) | Anytime |
| Brassica leafy greens | 24 |
| Canola | 12 |
| Cereal Grains (Buckwheat Oats <br> Pearl Millet Proso Mılet Teosinte <br> Wild Rice) |  |
| Citrus | Anytime |
| Corn Field | 10 |
| Corn Pop | 18 |
| Corn Sweet | 18 |
| Cotton | 18 |
| Dry Shell Peas and Beans | Anytime |
| Flax | Anytime |
| Frutıng Vegetables (except cucurbits) | Anytime |
| Grapes | Anytime |
| Horseradish | Anytime |
| Melons | Anytıme |
| Mint | Anytime |
| Peanuts | Anytime |
| Potatoes | Anytime |
| Rhubarb | Anytime |
| Rice | 10 |
| Rye | 4 |

## ACCEPTER

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Under the Federal ins tucide Fungicide and Rodenticide Act as amended for the pesticide registered under EPA Reg No


| Sorghum | 10 |
| :--- | :--- |
| Soybeans | Anytime |
| Strawberry | Anytime |
| Succulent peas | Anytime |
| Sugar Beets | 36 |
| Sugarcane | Anytime |
| Sunflower subgroup 20B | Anytime |
| Sweet Potatoes | 12 |
| Tritıcale | 4 |
| Tobacco | Anytime |
| Tree nuts | Anytime |
| Turf | Anytime |
| Turnips | Anytime |
| Wheat | 4 |

*Sorghum - 18 month rotation for rates above 80 oz/acre
For all other crops not listed the rotation interval is a minimum of 12 months

## SUNFLOWER SUBGROUP 20B

Calendula Castor oi plant Chinese tallowtree Euphorbia Evening primrose Jojoba Niger seed Rose hip Safflower Stokes aster Sunflower Tallowwood Tea oil plant Vernonia cultivars varieties and/or hybrids of these

Table 11


## Fall Applications

F6285 4F CAL may be applied in the fall as a preplan treatment to control or suppress weeds prior to planting the following spring F6285 4F CAL should be applied to the stubble or soil surface and allow moisture from rainfall or snow to move the product into the soil Do not mechanically incorporate in the fall or spring as this can destroy the herbicide barrier and allowing weed escapes to occur Do not apply to frozen soils or to existing snow cover to prevent F62854F CAL runoff from rain or snow melt that may occur following application F62854F CAL may be tank mixed with other residual soil herbicides that are labeled for fall use on sunflowers or other crops in subgroup 20B If weeds are emerged at the time of F62854F CAL application use a burndown herbicide such as glyphosate or paraquat at the full labeled rate in combination with F6285 4F CAL or split application as needed Select the appropriate rate from Table 11 above within the correct soil type and organic matter range When applying F6285 4F CAL in the fall use a mid to high rate within the rate range for the appropriate sol type and organic matter

## Early Preplant and Preemergence (Spring Applications)

F62854F CAL may be applied preplant on the soil surface in the spring to control weeds F62854F CAL can be applied early preplan prior to planting up to 3 days after planting as a preemerge sol application if seedlings have not broken the soil surface and if the seed furrow is completely closed For preemerge applications greater than 3 weeks prior to planting use the high rate within the appropriate rate range for the soil and organic matter type listed in the use rate chart above (Table 13) If applying F62854F CAL to course textured soils with less than $15 \%$ organic matter wait a minimum of 7 days after application before planting F6285 4F CAL can be tank mixed with other preemerge herbicides labeled for sunflowers or other crops in subgroup 20B If dry conditions persist following preemerge application of F62854F CAL a shallow incorporation may be needed to incorporate and activate the herbicide If weeds are emerged at the time of F6285 4F CAL application use a burndown herbicide at the full labeled rate in combination with F6285 4F CAL or split application as needed
Preplant Incorporated (PPI)
F6285 4F CAL may be applied as a Preplant Incorporated treatment in the spring prior to planting in reduced and conventional tillage F62854F CAL should be shallowly incorporated in the soil no deeper than 2 inches Incorporating F6285 4F CAL deeper than 2 inches can result in inconsistent weed control Use the appropriate rate from Table 11 above for the soil texture organic matter and pH level F6285 4F CAL can be tankmixed with other soil applied herbicides labeled for preplan incorporation in sunflowers or other crops in subgroup 20B

## Weeds Controlled

When applied according to directions F6285 4F CAL will provide control

| Amaranth Palmer | Pigweed red root |
| :--- | :--- |
| Flare redstem | Pigweed smooth |
| Kochia (ALS and Triazine Resistant) | Sida prickly |
| Lambsquarters common | Thistle Russian |


| Morningglory, ivyleaf | Waterhemp, common |
| :--- | :--- |
| Morningglory, tall | Waterhemp, tall |
| Nightshade, Eastern black |  |

For information on other weeds not listed above, refer to Weeds Controlled section (Table 5) in this label.

## Precautions

When applying F6285 4F CAL to coarse textured soils, it is recommended that growers allow a minimum of $7-14$ days from application to planting. Best results are achieved with F6285 4F CAL when applications are made early preplant and greater than 14 days before planting.

Some adverse crop response may occur on coarse textured soils with low organic matter (less than $1.5 \%$ ) and pH of 7.8 or higher, or on highly eroded soils, or in areas of calcareous outcroppings. F6285 4F CAL use rates should be reduced in those areas. Inadequate seed furrow closure or shallow planting (less than 1.0 inch ) may result in undesirable crop response. As expected, 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 F6285 4F CAL (sulfentrazone) 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 Application Instructions, F6285 4F CAL 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 F6285 4F CAL. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL under specific local conditions.

## Restrictions

Do not apply more than 8.0 fluid ounces ( 0.25 pound active) of F62854F CAL per twelve-month period to sunflowers. The twelvemonth period is considered to begin upon the initial F62854F CAL application.

Do not apply to frozen soils or existing snow cover to prevent F6285 4F CAL runoff from rain,or snowmelt that may occur following application.
Do not use on soils classified as sand, which have less than $1 \%$ organic matter.
Do not incorporate greater than 2 inches deep.

## PERMANENT CROPS

## CITRUS FRUIT, TREE NUTS, GRAPES and BERRIES

Citrus Fruits (Crop Group 10): Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliate orange; uniq fruit; cultivars, varieties, and/or hybrids of these

Preharvest Interval: 3 days
Grapes: Wine, Raisin, Table and Juice, Amur river grape

## Preharvest Interval: 3 days

Berries (Crop Group 13-07): aronia berry; bayberry; bearberry; bilberry; blackberry (including Andean blackberry, arctic blackberry, bingleberry, black satin berry, boysenberry, brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, common blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, evergreen blackberry, Himalayaberry, hullberry, lavacaberry, loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, mora, mures deronce, nectarberry, Northern dewberry, olallieberry, Orgeon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, Southern dewberry, tayberry, youngberry, zarzamora, and cultivars, varieties and/or hybrids of these); blueberry, highbush; blueberry, lowbush; buffalo currant; buffaloberry; che; Chilean guava; chokecherry; cloudberry; cranberry; cranberry, highbush; currant, black; currant, red; elderberry; European barberry; gooseberry; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); kiwifruit, fuzzy; kiwifruit, hardy; lingonberry; maypop; mountain pepper berries; mulberry; muntries; native currant; partridgeberry; phalsa; pincherry; raspberry, black and red; riberry; salal; schisandra berry; sea buckthorn; serviceberry; wild raspberry; cultivars, varieties, and/or hybrids of these

## Preharvest interval: 3 days

Tree Nuts (Crop Group 14): Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio and Walnut (Black and English),

## Preharvest Interval 3 days

## APPLICATION INFORMATION

F6285 4F CAL should be applied as a uniform broadcast soil application to orchard and vineyard floors and to berry beds and furrows or as a uniform band application directed to the base of the trunk in trees and vines and to the base of the berry and beds in berry s to provide preemergence control of weeds in Table 23

For best control F6285 4F CAL should be applied when there are no weeds present or a postemergence herbicide is tank mixed to elimınate emerged weeds

For broadcast applications a single application of F62854F CAL should be made at 4 to12 floz per acre ( 0125 to 0375 lb aı/A) Do not apply more than 12 fluid ounces ( 0375 lb aı) per acre per twelve month period The twelve month period is considered to begin when the initial application of F6285 4F CAL is applied

For improved weed management F6285 4F CAL can be applied in a tank mıxture with other preemergence and postemergence burndown herbicides Refer to the tank mix partners labels for additional restrictions including minimum spray volumes and crops in which they are labeled Burndown herbicides may include but are not limited to Aim Shark Rage D Tech glyphosate paraquat Rely and 24 D Do not tank mix with Chateauß herbicides (flumioxazin) or with other products containing sulfentrazone

When applied as a banded treatment ( $50 \%$ band or less) refer to formula in chart below for rate and volume F6285 4F CAL may be applied twice per year Do not apply more than $12 \mathrm{fl} \mathrm{oz} \mathrm{product} \mathrm{per} \mathrm{acre} \mathrm{( } 0375 \mathrm{lb} \mathrm{ai} / \mathrm{A}$ ) on a broadcast application basis per year Allow a minımum of 60 days between applications unless otherwise specified on the label or separate published FMC recommendations

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

| Band Width Feet | $X$ | Broadcast <br> Rate Per Acre | $=$ | Band Rate |
| :--- | :--- | :--- | :--- | :--- |
| Row Width Feet |  |  |  |  |
|  | $X$ | Broadcast <br> Volume Per Acre | $=$ | Band Volume |

A minımum of 10 gallons of spray solution per acre should be used to ensure uniform spray coverage Nozzle selection should meet manufacturer s spray volume and pressure recommendations for preemergence and postemergence herbicide applications The spray solution should have a pH between 50 and 90

F62854F CAL should only be applied to crops that have been established for one full growng season and are in good health and vigor Avoid contact of the spray solution on the green bark of trunks of young vines and trees by wrapping the trunk with a nonporous wrap grow tubes or wax containers which will keep the spray solution from coming in direct contact with the green tissue Avoid direct or indirect spray contact with crop foliage and fruit

Use ground equipment only do not apply using an airblast sprayer or by air
Best results are obtained when the soll is moist at the time of application and the application will be followed by at least $1 / 2$ inch of rainfall or sprinkler irrigation within two weeks after application Applications should be timed to take advantage of normal rainfall patterns and cool temperatures especially where drip or micro sprinkler irrigation is used which may not uniformly incorporate the herbicide

## WEED CONTROL INFORMATION

F62854F CAL is a selective soll applied herbicide for the control of susceptible broadleaf grass and sedge weeds found in Tables 23 and 24 Adequate moisture of at least $1 / 2$ inch is required within 14 days after application for optimal control If adequate rainfall is not received in a timely fashion irrigate with a minimum of $1 / 2$ inch of water When activating moisture is delayed a reduced level of weed control may occur These escaped weeds can be removed using a burndown herbicide

Tank mix F6285 4F CAL with a burndown herbicide and use an appropriate adjuvant when weeds are present at the time of application Refer to the tank mix partners product label for the proper use rates by weed sizes Use the most restrictive label immitations and precautions of the tank mix product(s)

Residual weed control may be reduced when F62854F CAL is applied where heavy crop trash such as leaves and branches and /or weed residues exists It is best to rake or blow off the leaves and trash when they fall and prior to the F6285 4F CAL application

Do not apply after petal fall unless using a hooded or shielded sprayer to ensure that the spray solution will not come in contact with the crop or foliage

Permanent Crop Weed List



ANNUAL AND PERENNIALSEDGE CONTROL INCLUDING NUTSEDGE
F6285 4F CAL applied at 12 fluid ounces per acre ( 0375 lb al/ A ) may provide control or suppression of sedges whether applied preemergence or postemergence to the sedges Postemergence applications to sedges allow F62854F CAL to be taken into the sedge through the foliage as well as soil uptake through the roots Soil uptake is the major means of uptake by sedges Good spray coverage is required for optimum control of sedges especially when applying postemergence to the sedges use a quality nonionic surfactant (NIC) at the rate of $025 \% \mathrm{v} / \mathrm{v}$ when applying postemergence

When applied as directed F6285 4F CAL will provide control or suppression of the following sedges

| Common Name | Scıentıfic Name |
| :--- | :--- |
| Kyllinga green | Kyllinga brevifolia |
| Kullinga false green | Kyllinga gracillma |
| Nutsedge purple | Cyperus rotundus |
| Nutsedge yellow | Cyperus esculentus |
| Sedge cylindrical | Cyperus retrorsus |
| Sedge globe | Cyperus globulosus |
| Sedge Surinam | Cyperus surnamensis |
| Sedge Texas | Cyperus polystachyos |

Optimum control of purple nutsedge may be obtained using split applications of F6285 4F CAL Apply 46 fluid ounces per acre followed by a second application to actively growng purple nutsedge Do not exceed the maximum rate of 12 fluid ounces ( 0375 lb al/A) per season F6285 4F CAL symptoms on purple nutsedge will be observed as reduced nutsedge stands necrosis chlorosis and/or stunting Optumum control may not be observed until the second year after the original treatment

## REPLANTING IN NEW OR ESTABLISHED ORCHARDS AND VINEYARDS

Delay replanting at least 30 days after F6285 4F CAL applications when replacing trees and vines in newly planted and established orchards and vineyards Use untreated soll when replanting trees and vines

## Precautions

These Crop Specific Use directions are based upon the interactive effects of F6285 4F CAL (sulfentrazone) and the pnmary soll 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 General F6285 4F CAL 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 wth F62854F CAL Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F62854F CAL under specific local conditions FMC does not recommend tank mixing this product with other products containing sulfentrazone or other group 14 herbicides as crop injury may occur

## Restrictions

- Do not apply F6285 4F CAL using arblast sprayers or by ar Use ground equipment only
- Do not apply more than 12 fluid oz product per acre ( 0375 lb ai/A) per season
- Apply to crops that have been growing for at least one full year and are in good condition
- Avoid direct or indirect spray contact to foliage and green bark (wrap trunk with non porous wrap grow tubes or wax contaners to keep spray solution off of green tissue)
Do not apply to powdery soils or soils where wnd may displace the soil unless irngation can be applied immediately after application
- Follow the most restrictive label of tank mix partners including all references to potential carryover and crop injury warnings and restrictions
- Pre harvest Interval (PHI) 3 days
- If two banded treatments are made in a growing season allow a minımum of 60 days between applications however do not exceed the seasonal maximum use rate


## TURNIPS

Apply 025 lbs active ingredient (8 fluid ounces) per acre of sulfentrazone Make one post emergent application at 4660 days before harvest Apply in 1040 gallons of water per acre

## Weeds Controlled

When Applied according to directions F6285 4F CAL Herbicide wili provide control of

| Galinsoga hairy | Waterhemp common |
| :--- | :--- |
| Lambsquarters common | Waterhemp tall |
| Pigweed redroot |  |

For information on other weeds not listed above refer to Weed Controlled section (Table 5) in this label

## Restrictıons

Do not apply more than 80 fluid ounces ( 025 pound active) per acre per 12 month period
Do not make more than one F6285 4F CAL Herbicide application per acre per 12 month period The twelve month period is considered to begin upon the initial F62854F CAL Herbicide application
Do not use on soils classıfied as sand which have less than 1\% organıc matter

## RHUBARB

Apply 025 lbs active ingredient ( 8 fluid ounces) per acre of sulfentrazone Make one post emergent broadcast application (ufst prior to rhubarb plants breaking dormancy) at $80(+/ 5)$ days before harvest Use a minımum of 10 gallons of water per acre
Weeds Controlled
When Applıed accordıng to dırectıons F6285 4F CAL Herbıcıde will provide control of

| Galınsoga haıry | Waterhemp common |
| :--- | :--- |
| Lambsquarters common | Waterhemp tall |
| Pigweed redroot |  |

For information on other weeds not listed above refer to Weed Controlled section (Table 5) in this label

## Restrictions

Do not apply more than 80 fluid ounces ( 025 pound active) per acre per 12 month period
Do not make more than one F6285 4F CAL. Herbicide application per acre per 12 month period The twelve month period is considered to begin upon the initial F62854F CAL Herbicide application
Do not use on soils classified as sand which have less than $1 \%$ organic matter

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## Supplemental Labeling

## F6285 4F CAL herbicide

EPA Reg No 279-3370
Expiration Date

## DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING ALL APPLICABLE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS ON THE EPA REGISTERED LABEL ARE TO BE FOLLOWED

This Supplemental labeling must be in the possession of the user at the time of pesticide application Read the label affixed to the container for F6285 4F CAL Herbicide before applying Carefully follow all precautionary statements and application use directions

VEGETABLE SOYBEAN (EDAMAME)


## Preemergence

F6285 4F CAL Herbicide may be applied to edamame as a preemergence treatment at 6 O fluid ounces ( 01875 pounds active) per acre Applications should be made with ground equiptient in a minimum of 10 gallons of finished spray per acre

## Precautions

Under extended periods of dry weather, adequate weed control may not be achieved
Some adverse crop response may occur on coarse textured soils with low organic matter (es than $15 \%$ ) and pH of 78 or higher, or on highly eroded soils, or in areas of calcareous
outcroppings F6285 4F CAL Herbicide use rates should be reduced in those areas If applying F6285 4F CAL to course textured soils with less than $15 \%$ organic matter, wait a mınımum of 7 days after application before planting Inadequate seed furrow closure or shallow planting (less than 10 inch) may result in undesirable crop response As expected, 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 F6285 4F CAL Herbicide (sulfentrazone) 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 Application Instructions, F6285 4F CAL 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 F6285 4F CAL Herbicide Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on F6285 4F CAL Herbicide under specific local conditions

## Restrictions

Do not apply more than 6 ounces ( 01875 pound active) per twelve-month period The twelvemonth period is considered to begin upon the initial F6285 4F CAL Herbicide application Do not apply to coarse soıls classufied as sand, which have less than $1 \%$ organic matter Do not incorporate

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