279-3337 9/28/2012 1/39

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

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

SEP 28 2012

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) to the herbicide product labels listed below containing the active ingredient, Sulfentrazone
EPA Reg. Nos: 279-3334 and 279-3337
Decision Numbers: 445546 and 445547

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 revision is made:

For all new uses being added to these liquid formulations, 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.

Continued on page 2

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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 CFR 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.

Sincerely,

Kathryn V. Montague
Product Manager 23
Herbicide Branch
Registration Division (7505P)

3/39

SPARTAN CHARGE

ACCEPTED
with COMMENTS
In EPA Letter Dated:
SEP 28 2012
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.
279-3337

EPA Reg. No. 279-3337 **EPA Est. _____**

Active Ingredient: (1)	**By Wt.**
Carfentrazone-ethyl*	3.53%
Sulfentrazone**	31.77%
Other Ingredients:	64.7%
Total:	100.0%

*SPARTAN CHARGE Herbicide contains 0.35 pounds per US gallon of the active ingredient Carfentrazone-ethyl.
** SPARTAN CHARGE Herbicide contains 3.15 pounds per US gallon of the active ingredient Sulfentrazone.
U.S. Patent Pending

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID (2)

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. 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.

HOTLINE NUMBER (3)

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-331-3148 for emergency medical treatment information.

SPARTAN CHARGE IS FORMULATED AND PACKAGED IN USA.

FROM FMC
1735 Market Street
Philadelphia, PA 19103

ATTENTION (4)

-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 Conditions of Sale and Limitation of Warranty and Liability 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 (5)

Hazards to Humans and Domestic Animals

Caution

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

Personal Protective Equipment (PPE) (6)

Applicators and other handlers must wear: protective eyewear (goggles or face shield), long-sleeved shirt and long pants, chemical resistant gloves made of 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 manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Remove PPE immediately after handling the product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards (7)

This pesticide is toxic to algae, marine/estuarine invertebrates, and moderately toxic to fish. 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 wash waters 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 contamination

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

Surface Water Advisory
This product can contaminate surface water through spray drift Under some conditions this product may also have a high potential for runoff into surface water (primarily via dissolution in runoff water) for several to many months post application These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters frequently flooded areas areas overlying extremely shallow groundwater areas with in field canals or ditches that drain to surface water areas not separated from adjacent surface waters with vegetated filter strips and areas overlying tile drainage systems that drain to surface waters

AGRICULTURAL USE REQUIREMENTS (9)

Use this product only in accordance with its labeling and with the Worker Protection Standard 40 CFR part 170 This Standard contains requirements for the protection of agricultural workers on farms forests nurseries and greenhouses and handlers of agricultural pesticides It contains requirements for training decontamination notification and emergency assistance It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours (10)

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants soil or water is Coveralls over long sleeved shirt and long pants chemical resistant gloves and shoes plus socks

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY (11)

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 shall not be liable for any incidental consequential or special damages resulting from the use or handling of this product TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER AND THE EXCLUSIVE LIABILITY OF FMC AND SELLER FOR ANY AND ALL CLAIMS LOSSES INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY CONTRACT NEGLIGENCE TORT STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR AT THE ELECTION OF FMC OR SELLER THE REPLACEMENT OF THE PRODUCT

This Conditions of Sale and Limitation of Warranty and Liability may not be amended by any oral or written agreement

Storage and Disposal (12)

Do not contaminate water food or feed by storage or disposal

Pesticide storage
Store product in original container only away from other pesticides fertilizer food or feed Store in a cool dry place and avoid excess heat Do not store below 32F degrees

In Case of Spill
Avoid contact Isolate areas and keep out animals and unprotected persons

To Confine Spills
Dike surrounding area sweep up spillage Dispose of in accordance with information given under Pesticide Disposal Wash spill area with water absorb with sand cat litter or commercial clay sweep up and dispose of in an approved manner Place damaged container in a large holding container Identify contents per required hazardous waste labeling regulations

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

Container Handling
Nonrefillable container Do not reuse or refill this container Triple rinse container (or equivalent) promptly after emptying Triple rinse as follows (For containers greater than 5 gallons) Empty the remaining contents into application equipment or a mix tank Fill the container 1/4 full with water Replace and tighten closures Tip container on its side and roll it back and forth ensuring at least one complete revolution for 30 seconds Stand the container on its end and tip it back and forth several times Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal Repeat this procedure two more times (For containers 5 gallons or less) Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip Fill the container 1/4 full with water and recap Shake for 10 seconds Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal Drain for 10 seconds after the flow begins to drip Repeat this procedure two more times Triple rinse (or equivalent) Then offer for recycling if available or reconditioning or puncture and dispose of in a sanitary 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 container for any other purpose Cleaning the container before final disposal is the responsibility of the person disposing of the container Cleaning before refilling is the responsibility of the refiller To clean the container before final disposal empty the remaining contents into application equipment or mix tank Fill the container about 10 / full with water Agitate vigorously or recirculate water with the pump for 2 minutes Pour or pump rinsate into application equipment or rinsate collection system Repeat this rinsing procedure two more times

RESISTANCE MANAGEMENT (13)

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

DIRECTIONS FOR USE (14)

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

Read all Directions for Use carefully before applying

Do not apply this product in a way that will contact workers or other persons either directly or through drift Only protected handlers may be in the area during application For any requirements specific to your State or Tribe consult the agency responsible for pesticide regulation

PRODUCT INFORMATION (15)

SPARTAN CHARGE is a selective herbicide that provides postemergent contact and soil residual weed control SPARTAN CHARGE may be applied as a burndown prior to planting early preplant or as a preemergent application before or after weed emergence for control of susceptible broadleaf weeds SPARTAN CHARGE is a 3 5 pound per gallon suspoemulsion containing the active ingredients carfentrazone ethyl and sulfentrazone Applications of SPARTAN CHARGE must be made before crop seed germination to prevent injury to the emerging crop seedlings When applications after planting are delayed injury may occur if seeds are germinating or if they are located near the soil 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 SPARTAN CHARGE In addition to general application information refer to the specific directions of use for a particular crop/use pattern as set forth below

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

Operations that involve mixing loading rinsing or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of

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

Do not apply this product through any type of irrigation system

Do not use flood irrigation to apply or incorporate this product

This product must be used in a manner which will prevent back siphoning into wells spills or improper disposal of excess pesticide spray mixtures or rinsates

PRODUCT APPLICATION INSTRUCTIONS (16)

SPARTAN CHARGE is to be mixed with water liquid fertilizer or mixtures of water and liquid fertilizer and applied in fallow systems or as a preplant burndown or preemergence herbicide to labeled crops SPARTAN CHARGE provides postemergent contact and soil residual control of susceptible weed species

Emerged susceptible broadleaf weeds are easiest to control when they are small (less than 3 inches tall) and actively growing Thorough coverage is essential for control of small susceptible broadleaf weeds If thorough coverage is not achieved postemergent weed control will be poor Always use the higher application rate of this product for the appropriate soil texture and organic matter when weed growth is dense or heavy or when weeds are growing in an undisturbed or non cultivated area Reduced weed control may occur if weeds are experiencing drought stress disease or insect damage or when weeds are thickly covered with dust For control of weeds not listed on this label SPARTAN CHARGE may be tank mixed with other herbicides such as glyphosate Read and follow all manufacturers label directions for the companion herbicide(s) except for specific use directions on this label The use of a quality spray adjuvant is required for optimum control of emerged weeds Refer to the individual crop sections of this label for specific adjuvant type and use rates

The residual activity of SPARTAN CHARGE applications requires adequate moisture for herbicidal activation The amount of residual activity is dependent on several factors These factors include but are not limited to existing soil moisture at application soil type organic matter and tilth Where irrigation is not available and rainfall has not provided activation particularly for surface applications of SPARTAN CHARGE a shallow incorporation (less than 2) is recommended for destruction of any existing weeds and to incorporate SPARTAN CHARGE Herbicide incorporation will initiate the process of activation with existing soil moisture In circumstances where rainfall has not occurred and/or irrigation is not possible alternative or additional weed management practices may be required

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

ENVIRONMENTAL AND SOIL FACTORS INFLUENCING SPARTAN CHARGE APPLICATIONS (17)

Do not apply to soils classified as sand with less than 1 / organic matter

The user is required to read and follow the specific SPARTAN CHARGE use directions and restrictions for each crop as defined in subsequent sections of this label The user is cautioned that some crops and weeds respond differently to SPARTAN CHARGE This response is governed by the SPARTAN CHARGE application rate various soil factors and inherent crop sensitivity See individual crop use sections for specific directions on the use of SPARTAN CHARGE for optimum weed control and crop safety results in each crop

INFLUENCE OF CLAY SOIL TYPE AND PH ON SPARTAN CHARGE USE RATES AND CROP RESPONSE

Following an application of SPARTAN CHARGE to soil germinating seeds and seedlings take up SPARTAN CHARGE from the soil solution The amount of SPARTAN CHARGE in the soil solution and available for weed uptake is determined primarily by soil type organic matter and soil pH SPARTAN CHARGE adsorbs to the clay and organic matter 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)

Table 1 SOIL CLASSIFICATION CHART (18)

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	

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 SPARTAN CHARGE availability in the soil solution As soil pH increases SPARTAN CHARGE availability increases Accurate soil pH information will require an accurate analysis of representative soil samples

The total amount of SPARTAN CHARGE available 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 SPARTAN CHARGE in soil solution

Irrigation with highly alkaline water (high pH) following a SPARTAN CHARGE soil application can also significantly increase the amount of SPARTAN CHARGE available in the soil solution Irrigation with water having a pH greater than 7 5 could result in adverse crop response This response will ultimately depend on initial SPARTAN CHARGE 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 SPARTAN CHARGE 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

MIXING AND LOADING INSTRUCTIONS (19)

Water or liquid fertilizer solutions may be used as the carrier for SPARTAN CHARGE when applied alone or in tank mixtures with other registered herbicides A jar test is recommended to determine the compatibility of SPARTAN CHARGE and the fertilizer solution When mixing with fertilizer solutions it is important to premix SPARTAN CHARGE in clear water See directions for applying SPARTAN CHARGE alone with liquid fertilizer under section 20

A crop oil concentrate methylated seed oil nonionic surfactant (NIS) wetting agent labeled or other equivalent adjuvant labeled for use with herbicides is required for optimum control of emerged weeds Read and follow all applicable use directions precautions and restrictions on the surfactant label

SPARTAN CHARGE Applied Alone
Select the proper SPARTAN CHARGE application rate from the following tables in the crop section of this label Fill the spray tank with approximately one half of the volume of water needed for the acreage being treated With agitator operating add the required amount of SPARTAN CHARGE for acreage being treated by opening the bottle(s) and measuring directly into the spray tank Allow the product to fully disperse Complete the addition of spray water Maintain agitation during filling mixing and application Apply the SPARTAN CHARGE spray mixture immediately after mixing

Do not store spray mixture

Do not prepare spray mixtures in nurse tanks

SPARTAN CHARGE Applied in Tank Mix Combination
Select the proper SPARTAN CHARGE application rate from TIMING AND METHOD OF APPLICATION section of label Read and follow all applicable use directions precautions and restrictions on the respective tank mix product labels To ensure product compatibility a jar test should be conducted before large volume mixing (see MIXTURE COMPATIBILITY TESTING chart below) Provided the jar test indicates the mixture is compatible prepare the tank mixture as follows

Fill the spray tank with approximately one half of the volume of water needed for the acreage being treated With agitator operating add the required amount of SPARTAN CHARGE for the acreage being treated by opening the bottle(s) and measuring directly into the spray tank Allow the product to fully disperse If more than one product is to be used add each separately using the following sequence dry formulations (e g wettable powders dry flowables) first SPARTAN CHARGE and other liquid suspensions (e g flowables) next and finally liquids (e g EC s) Allow time for complete mixing and dispersion after each addition adding water as necessary Complete the addition of spray water Maintain agitation during filling mixing and application Use SPARTAN CHARGE tank mixtures immediately after mixing

Do not store tank mixtures

Do not prepare spray mixtures in nurse tanks

SPARTAN CHARGE Applied Alone with Liquid Fertilizer
When adding SPARTAN CHARGE to a liquid fertilizer carrier SPARTAN CHARGE should be premixed in clear water before adding to fertilizer solution Adding SPARTAN CHARGE to fertilizer mixtures without first mixing with water can result in incompatibility

Fill the spray tank one half full with fertilizer solution With agitator operating add the SPARTAN CHARGE slurry to the spray tank Use a minimum of one gallon of water for each container of SPARTAN CHARGE Then add slurry to the spray tank through a 20 35 mesh screen Rinse container used for pre mixing and add rinsate to the spray tank Complete filling the sprayer tank with fertilizer Maintain agitation during filling mixing and application Use SPARTAN CHARGE spray mixture immediately after mixing
Do not store mixture
Do not prepare spray mixtures in nurse tanks

Jar Testing Fertilizer Spray Mixtures
Applications of SPARTAN CHARGE alone or with recommended tank mixtures in conjunction with clear liquid fertilizer solutions (28 32 / nitrogen only) may be used unless use directions specifically state otherwise Small quantities should be tested for compatibility by the following procedure before mixing in full spray tank quantities
1) Add 1 pint of fertilizer solution in a quart jar
2) Add the appropriate amount of herbicide based on the MIXTURE COMPATIBILITY table below If more than one product is to be used add each separately using the following sequence dry formulations (e g wettable powders dry flowables) first liquid suspensions (e g flowables) next and finally liquids (e g EC s)

3) Close jar and shake well
4) Watch mixture for several seconds again after 5 minutes and again after 30 minutes If herbicide/fertilizer combination remains mixed or can be remixed readily (i e does not permanently separate foam gel or become lumpy) the mixture is compatible and can be mixed in full volumes and sprayed If the mixture is compatible prepare spray by adding fertilizer solution to the tank first and then follow directions noted below

MIXTURE COMPATIBILITY TESTING

Herbicide Type	Herbicide Field Use Rate	Amount Herbicide Added Per Pint
Wettable Powder or Dry Flowable	0 5 pound	0 75 teaspoon
	1 0 pound	1 50 teaspoons
	2 0 pounds	3 00 teaspoons
	3 0 pounds	4 50 teaspoons
Emulsified Concentrates	1 0 pint	0 5 teaspoon
Liquid Flowables	1 0 quart	1 0 teaspoon
	2 0 quarts	2 0 teaspoons
	3 0 quarts	3 0 teaspoons

Based on a spray volume of 25 gallons per acre For lower or higher spray volumes adjust fluid fertilizer quantity accordingly

Adjuvant Requirements
The use of methylated seed oil (MSO) or a crop oil concentrate (COC) adjuvant labeled for use with herbicides is required for optimum control of emerged weeds A nonionic surfactant adjuvant and water conditioning agent is recommended when SPARTAN CHARGE is tank mixed with glyphosate Read and follow all applicable use directions precautions and restrictions on the surfactant label

APPLICATION INFORMATION (20)

Ground Application
Use a boom and nozzle sprayer equipped with the appropriate nozzles and screens and adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures Use nozzles that that produce minimal amounts of fine spray droplets Do not exceed 30 psi spray pressure unless otherwise required by the manufacturer of drift reducing nozzles Apply a minimum of 10 gallons of finished spray per acre Use higher spray volumes when there is a dense weed population Thorough coverage is essential for control of susceptible broadleaf weeds Be aware that overlaps and slower ground speeds while starting stopping or turning while spraying may result in excessive application and subsequent crop response

Continuous agitation is required until all spray mixture has been applied Avoid swath overlaps Shut off spray booms while turning slowing or stopping as over application may result Do not allow SPARTAN CHARGE spray mixtures to sit overnight as settling of product and difficulty of re suspending may occur

To avoid injury to sensitive crops spray equipment used for SPARTAN CHARGE applications must be drained and thoroughly cleaned with water CHARGE ammonia before being used to apply other products See Spray Clean out Section 22 on page 6
Avoid all direct and/or indirect spray contact with non target plants Do not apply near desirable vegetation Allow adequate distance between target area and desirable plants to minimize exposure
Do not apply when wind speed favors drift beyond the area of treatment

Aerial Application
SPARTAN CHARGE may be applied by air using properly calibrated nozzle types and arrangements that will provide optimum coverage while producing minimal amounts of fine droplets Apply sufficient spray volume to achieve adequate coverage Apply a minimum of five (5) gallons of finished spray per acre Do not apply when wind speed favors drift beyond the area intended for treatment

Runoff and Wind Erosion Precautions

Do not apply under conditions which favor runoff or wind erosion of soil containing SPARTAN CHARGE to non target areas

To prevent off site movement due to runoff or wind erosion
Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion Under these conditions allow the soil surface to be settled by rainfall or irrigation

Do not apply to impervious substrates such as paved or highly compacted surfaces or frozen or snow covered ground

Do not apply to soils when saturated with water
Do not use tail water from the first flood or furrow irrigation of treated fields to treat non target crops unless at least 1/2 inch of rainfall has occurred between application and the first irrigation

SPRAY DRIFT REDUCTION ADVISORY (21)

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 applications to agricultural field crops

Where States and local governments have more stringent regulations they must be observed

Droplet Size Information
Reduce drift potential by applying large droplets The optimum drift management strategy is to apply the largest droplets that will provide sufficient coverage and control Applying larger droplets reduces drift potential but will not prevent drift when applications are made improperly or under unfavorable environmental conditions (See Wind Temperature and Humidity and Temperature Inversions)

VMD – VMD is the expression of the droplet size of the spray cloud. The VMD value means that 50% of the droplets are larger than the expressed value and 50% of the droplets are smaller than the expressed value. Optimum spray clouds should be 450 microns with fewer than 10% of the droplets being 200 microns or smaller.

Volume – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows usually produce larger droplets.

Pressure – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of Nozzles – Use the minimum number of nozzles that provide uniform coverage.

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.

Application Height – Making applications at the lowest height practical reduces exposure of spray droplets to evaporation and wind movement.

Swath Adjustment – Swath adjustment distance must increase with increasing drift potential (higher wind, smaller droplets, etc.)

Wind – Drift potentials are lowest between wind speeds of 3 to 10 miles per hour. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Applications in wind conditions outside of this range could increase the risk of off-target effects and should be avoided. Note that local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity - When making applications in conditions of 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 – Do not apply SPARTAN CHARGE during temperature inversions because the 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 light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the following morning. Their presence can be indicated by ground fog. However, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or a smoke generator. Smoke that layers and moves laterally in a concentrated clod (under low wind conditions) indicate an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas – Applications should be made when the wind is blowing away from adjacent sensitive areas (e.g. residential areas, bodies of water, known habitats for threatened or endangered species and non-target crops).

Off-Target Movement of SPARTAN CHARGE – Drift of dilute spray mixtures containing SPARTAN CHARGE must be prevented. Observation of the preceding environmental conditions, correct application equipment design, calibration and application practices will significantly diminish the risk of of-target spray drift. SPARTAN CHARGE can cause significant symptomology by drift on to sensitive crops and other plants. This symptomology may manifest initially as discreet, localized spots where contact by SPARTAN CHARGE drift mixtures. Depending on concentration of the spray solution and droplet size (effectively determining the concentration of SPARTAN CHARGE) and also depending on the inherent sensitivity of the plants involved, these spots or lesions may not coalesce. These effects will usually not have lasting effects on plant growth, but will likely reduce the value of affected fruit of 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 SPARTAN CHARGE 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 SPARTAN CHARGE.

SPRAY EQUIPMENT CLEAN-OUT (22)

After spraying SPARTAN CHARGE and before using sprayer equipment for any other applications, the sprayer must be thoroughly cleaned using the following procedure.

1. Drain sprayer tank, hoses, and spray boom and thoroughly rinse the inside of the sprayer tank with clean water to remove sediment and residues. Thoroughly flush sprayer hoses, boom and nozzles with clean water.

2. Fill the tank 1/2 full with clean water, and add appropriate detergent or ammonia (follow manufacturer's directions for use). Fill the tank to capacity and operate the sprayer for 15 minutes to flush hoses, boom, and nozzles.

3. Convenient and thorough cleaning of the sprayer can be achieved if the cleaning solution is left in the spray tank, hoses, spray booms and spray nozzles overnight or during storage.

4. Before using the sprayer, drain the spray system. Rinse the tank with clean water and flush through the hoses, boom, and nozzles. Remove and clean spray tips and screens separately with the detergent or ammonia solution.

5. Properly dispose of all cleaning solution and rinsate in accordance with Federal, State and local regulations and guidelines.

Do not drain or flush equipment on or near desirable trees or plants.

Do not contaminate any body of water including irrigation water that may be used on other crops.
Should small quantities of SPARTAN CHARGE 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.

MAXIMUM ALLOWABLE SPARTAN CHARGE USE PER ACRE PER 12 MONTH PERIOD* (23)

Refer to the crop section of this label for specific product use directions.

Crop	Ounces SPARTAN CHARGE Per Acre	Pounds Active SPARTAN CHARGE** Per Acre
Berries (Crop Group 13-07)	15.2	0.41
Citrus (Crop Group 10)	15.2	0.41
Corn	10.2	0.28
Dry peas & beans	10.2	0.28
Fallow	10.2	0.28
Grapes	15.2	0.41
Lima beans, succulent (Tennessee only)	7.6	0.21
Soybeans	8.5	0.23
Sunflowers	10.2	0.28
Peanut	12.2	0.33
Potato	10.2	0.28
Sugarcane	15.2	0.41
Tobacco	15.2	0.41
Tree Nuts (Crop Group 14)	15.2	0.41
Cabbage	15.2	0.41
Horseradish	10.2	0.28
Sod production	15.2	0.41

*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 SPARTAN CHARGE application.

** Based on total active carfentrazone-ethyl and sulfentrazone

RATE CONVERSION CHART (24)

SPARTAN CHARGE		CARFENTRAZONE-ETHYL		SULFENTRAZONE	
Product oz/A	lb ai*	Product oz/A**	lb ai	Product oz/A8***	lb ai
3.75	0.10	0.65	0.01	2.9	0.09
5.75	0.15	1.0	0.015	4.5	0.14
8.5	0.23	1.5	0.02	6.7	0.21
10.2	0.28	1.8	0.03	8.0	0.25
15.25	0.41	2.7	0.04	12.0	0.37

* Total pounds active of sulfentrazone + carfentrazone-ethyl

** Based on Aim 2EC formulation

*** Based on SPARTAN CHARGE formulation

CROP ROTATIONAL INTERVALS (25)

Shown below are the minimum intervals in months from the time of SPARTAN CHARGE application until SPARTAN CHARGE treated soil may be replanted with the crops listed. When SPARTAN CHARGE is tank mixed with other herbicide(s), refer to all those labels for re-cropping instructions, following the intervals that are the most restrictive. For crops not listed, the interval is 12 months in addition to a successful field bioassay.

The field bioassay is a test strip of the intended crop planted across the previously treated field and grown to maturity. The test strip should include low spots, knolls, and variable pH and soil types. If crop responses are not observed, the crop may be planted the following year.

CROP ROTATION INTERVALS*

CROP	INTERVAL (Months)
Alfalfa	12
Barley	4
Berries (Crop subgroup 13-07)	Anytime
Cabbage (transplant only)	Anytime
Canola, Crambe	24

Citrus (Crop Group 10)	Anytime
Corn field	Anytime
Corn pop	Anytime
Corn seed	Anytime
Corn sweet	4
Cotton	12
Dry Shell Peas & Beans	Anytime
Grapes	Anytime
Horseradish	Anytime
Lima Beans (Tennessee only)	Anytime
Mint	Anytime
Peanuts	Anytime
Potatoes	Anytime
Rice	10
Rye	4
Sorghum	10
Soybeans	Anytime
Sugar Beets	36
Sugarcane	Anytime
Sunflowers	Anytime
Sweet Potatoes	12
Tobacco	Anytime
Tree Nuts (Crop group 14)	Anytime
Triticale	4
Turf	Anytime
Wheat	4

For all other crops not listed the rotation interval is a minimum of 12 months
18 month rotation for rates above 10 2 fluid ounces per acre

Hybrid Corn Seed Production
Corn inbred lines grown for hybrid seed production may be injured in the growing season following an application of SPARTAN CHARGE Inbred lines should be thoroughly tested for crop tolerance before rotating to production scale acreages FMC will not accept responsibility for any crop injury on field corn grown for seed following an application of SPARTAN CHARGE

REPLANTING INSTRUCTIONS (26)

If the initial planting of labeled crops fails to produce a uniform stand only labeled crops for SPARTAN CHARGE or the tank mix partner whichever is most restrictive may be replanted Do not retreat fields with a second application of SPARTAN CHARGE or other herbicide containing sulfentrazone When tank mixing with a labeled product refer to the replant instructions for that product Do not replant treated fields with any crop at intervals that are inconsistent with the CROP ROTATION INTERVALS on this label When replanting use minimum soil tillage to preserve the herbicide barrier and achieve maximum weed control

POSTEMERGENT WEEDS CONTROLLED

Pre Plant Burndown (27) (Refer to individual crop sections for preemergent weeds controlled)

When used as directed SPARTAN CHARGE will provide postemergent control of the following weeds (less than 3 inches tall) **as specified**

Weeds Controlled	**SPARTAN CHARGE use rate fluid ounce (lb ai) per acre**
Lambsquarters (up to 3 inches tall)	3 75 (0 10)
Morningglory Ivyleaf (up to 3 leaves)	
Morningglory pitted (up to 3 leaves)	
Nightshade Eastern black	
Pigweed, redroot	
Velvetleaf	
Waterhemp (up to 2 inches tall)	
Weeds Controlled	**SPARTAN CHARGE use rate fluid ounce (lb ai) per acre**
All the weeds controlled at 3 75 fluid ounces per acre (0 10 lb/acre) plus the weeds listed below	4 75 (0 13)
Cheeseweed	

Filaree redstem	
Flixweed	
Lambsquarters common	
Mallow common	
Morningglory entireleaf	
Morningglory Ivyleaf	
Morningglory pitted	
Morningglory scarlet	
Nightshade hairy	
Pennycress field	
Pigweed smooth	
Sesbania hemp	
Smartweed (PA) seedling	
Tansymustard	
Waterhemp	
Weeds Controlled	**SPARTAN CHARGE use rate fluid ounce (lb ai) per acre**
All the weeds controlled at 4 75 fluid ounces per acre (0 13 lb/acre) plus the weeds listed below	6 0 (0 16)
Amaranth spiny	
Anoda spurred	
Bedstraw catchweed	
Buffalobur	
Carpetweed	
Cocklebur	
Copperleaf hophornbeam	
Cotton GMO varieties	
Cotton volunteer	
Dayflower	
Eclipta	
Fiddleneck coast	
Groundcherry smooth (seedling)	
Groundcherry Wright s	
Jimsonweed	
Kochia	
Rocket London	
Morningglory Ivyleaf	
Morningglory tall	
Nightshade American black	
Nightshade black	
Sheperdspurse	
Spiderwort tropical	
Thistle Russian	
Wallflower bushy	
Weeds Controlled	**SPARTAN CHARGE use rate fluid ounce (lb ai) per acre**
All the weeds controlled at 6 0 fluid ounces per acre (0 16 lb/acre) plus the weeds listed below	8 5 (0 23) – 15 2 (0 375)
Amaranth Palmer	
Ammania purple	
Buckwheat wild	
Burclover	
Filaree broadleaf	
Filaree white	

Lettuce prickly	
Mallow Venice (up to 2 inches tall)	
Meadowfoam	
Mustard spp	
Redmaids	
Spurry corn	
Spurry clover	

FALLOW SYSTEMS (28) (see Table 2 for required application rates)

SPARTAN CHARGE may be used in fallow cropping systems only where crops are seeded and harvested on alternate years for soil moisture conservation using rates in Table 2 Follow crop rotational restrictions when replanting following SPARTAN CHARGE applications

Table 2

SPARTAN CHARGE Use Rate Table Fallow Applications			
Broadcast Rate	**Fluid Ounces (lb ai) SPARTAN CHARGE per acre**		
	Soil Texture		
/ Organic Matter	**Coarse**	**Medium**	**Fine**
<1 5	3 75(0 10) 5 0(0 14)	3 75(0 10) 5 75(0 16)	5 0(0 14) 6 5(0 18)
1 5 3 0	3 75(0 10) 5 75(0 16)	5 0(0 14) 7 75(0 21)	5 75(0 16) 8 5(0 23)
>3	5 0(0 14) 7 75(0 21)	5 75(0 16) 8 5(0 23)	6 5(0 18) 10 2(0 28)
Refer to the previous information on soil types under the COARSE MEDIUM and FINE categories Use higher rates for soils of pH less than 7 0 and lowest rate for pH greater than 7 0 within the rate range			

Adjuvant Requirements
For optimum control of emerged weeds a nonionic surfactant crop oil concentrate methylated seed oil or equivalent adjuvant is required Use a nonionic surfactant (NIS) at 0 25 / v/v (2 pints/100 gallons of spray solution) having at least 80 / active ingredient or a petroleum or oil seed based crop oil concentrate (COC) at 1 5 to 2 0 / v/v (1 5 to 2 0 gallons per 100 gallons of spray solution) or a methylated seed oil (MSO) A high quality sprayable liquid nitrogen fertilizer at 2 0 to 4 0 / v/v (2 to 4 gallons per 100 gallons) or ammonium sulfate at 2 to 4 pounds per acre may be used in addition to the selected NIS COC or MSO When an adjuvant is to be used with this product FMC recommends use of a Chemical Producers and Distributors Association certified adjuvant

Optimum broad spectrum control of annual and perennial weeds requires a tank mix with a broad spectrum burndown herbicide such as glyphosate glufosinate or paraquat When tank mixing SPARTAN CHARGE with other products be sure the SPARTAN CHARGE is added to the spray tank water first For specific mixing instructions refer to the Mixing and Loading instructions section of this label

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

Precautions
These Crop Specific Use directions are based upon the interactive effects of SPARTAN CHARGE 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 General Application Instructions General SPARTAN CHARGE 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 SPARTAN CHARGE Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on SPARTAN CHARGE under specific local conditions **Thorough coverage is essential for control of small susceptible broadleaf weeds** If thorough coverage is not achieved postemergent weed control will be poor If adequate moisture (1/2 to 1 of rainfall or irrigation) is not received within 7 to 10 days and also if dry conditions persist throughout the growing season erratic preemergent weed control may result Additional moisture is needed throughout the growing season to maintain herbicide activity and prevent weed escapes

When used as directed SPARTAN CHARGE will provide preemergent control of the following weeds (refer to section 27 for postemergent weeds controlled)

Kochia (ALS and Triazine	Pigweed redroot

Resistant)	
Lambsquarters common	Pigweed smooth
Morningglory Ivyleaf	Thistle Russian
Morningglory tall	Waterhemp common
Nightshade Eastern Black	Waterhemp tall

Restrictions
Do not apply more than 10 2 fluid ounces per twelve month period The twelve month period is considered to begin upon the initial SPARTAN CHARGE 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 SPARTAN CHARGE runoff from rain or snowmelt that may occur following application

CORN (Field Corn, Seed Corn, Popcorn) (29)

Preplant Burndown Early Preplant and Preemergence Applications (see Table 3 for application rates)
Apply SPARTAN CHARGE alone or with other herbicides or liquid fertilizers as a burndown or preemergence treatment prior to emergence of corn to control or suppress weeds using rates in table 3 Properly closed seed furrows are required when applying at planting time or before seed germination When planting into soil treated preplant with SPARTAN CHARGE minimize soil disturbance to maintain the herbicide barrier on the soil surface to achieve maximum weed control Apply SPARTAN CHARGE using the rates in Table 3 below

For applications 14 21 or more 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 3 Optimum broad spectrum control of annual and perennial weeds requires a tank mix with a broad spectrum burndown herbicide such as glyphosate glufosinate or paraquat When tank mixing SPARTAN CHARGE with other products be sure the SPARTAN CHARGE is added to the spray tank water first For specific mixing instructions refer to the Mixing and Loading instructions section of this label

Table 3

SPARTAN CHARGE Use Rate Table (Corn)
Preplant Burndown Early Preplant and Preemergence

Broadcast Rate	**Fluid Ounces (lb ai) SPARTAN CHARGE per acre**		
	Soil Texture		
/ Organic Matter	**Coarse**	**Medium**	**Fine**
<1 5	3 75(0 10) 5 75(0 16)	3 75(0 10) 5 75(0 16)	5 0(0 14) 6 7(0 18)
1 5 – 3 0	3 75(0 10) 5 75(0 16)	5 0(0 14) 7 6(0 21)	5 75(0 16) 8 6(0 23)
>3 0	5 0(0 14) 7 6(0 21)	5 75(0 16) 8 6(0 24)	7 6(0 21) 10 2(0 28)

Refer to the previous information on soil types under the COARSE MEDIUM and FINE categories
Use higher rates for soils of pH less than 7 0 and lowest rate for pH greater than 7 0 within the rate range

Adjuvant Requirements
For optimum control of emerged weeds a nonionic surfactant crop oil concentrate methylated seed oil or equivalent adjuvant is required Use a nonionic surfactant (NIS) at 0 25 / v/v (2 pints/100 gallons of spray solution) having at least 80 / active ingredient or a petroleum or oil seed based crop oil concentrate (COC) at 1 5 to 2 0 / v/v (1 5 to 2 0 gallons per 100 gallons of spray solution) or a methylated seed oil (MSO) A high quality sprayable liquid nitrogen fertilizer at 2 0 to 4 0 / v/v (2 to 4 gallons per 100 gallons) or ammonium sulfate at 2 to 4 pounds per acre may be used in addition to the selected NIS COC or MSO

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

Precautions
These Crop Specific Use directions are based upon the interactive effects of SPARTAN CHARGE 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 General Application Instructions General SPARTAN CHARGE 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 SPARTAN CHARGE Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on SPARTAN CHARGE under specific local conditions Thorough coverage is essential for control of small susceptible broadleaf weeds If thorough coverage is not achieved postemergent weed control will be poor

When used as directed, SPARTAN CHARGE will provide preemergent control of the following weeds (refer to section 27 for postemergent weeds controlled):

BROADLEAVES	
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	*Amaranthus, spinosus*
Amaranth, spleen	*Amaranthus dubius*
Jimsonweed	*Datura stramonium*
Kochia	*Kochia scoparia*
Lambsquarters, common	*Chenopodium album*
Morningglory, Entireleaf	*Ipomea hederacea integriusc*
Morningglory, Ivyleaf	*Ipomea hederacea hederacea*
Morningglory, Palmleaf	*Ipomea Wrightii*
Morningglory, purple	*Ipomea turbinata*
Morningglory, red	*Ipomea coccinea*
Morningglory, scarlet	*Ipomea hederifolia*
Morningglory, Smallflower	*Jacquemontia tamnifolia*
Morningglory, tall	*Ipomea, purpurea*
Nightshade, black	*Solanum nigrum*
Nightshade, Eastern black	*Solanum americanum*
Pigweed, redroot	*Amaranthus retroflexus*
Pigweed, smooth	*Amaranthus hybridus*
Thistle, Russian	*Lactuca serriola*
Waterhemp, common	*Amaranthus rudis*
Waterhemp, tall	*Amaranthus tuberculatos*
SEDGES	
Nutsedge, purple	*Cyperus rotundus*
Nutsedge, yellow	*Cyperus esculentus*
Sedge, annual	*Cares* spp.

Restrictions
Do not apply SPARTAN CHARGE Herbicide after crop emergence, or if the seedling is close to the soil surface, as undesirable crop response may occur.

Do not apply more than 10.2 fluid ounces per twelve-month period. The twelve-month period is considered to begin upon the initial SPARTAN CHARGE 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 SPARTAN CHARGE runoff from rain or snowmelt that may occur following application.

POTATOES (30)

Table 4

Spartan Charge Use Rate Table (Potatoes) Preemergence Application			
Broadcast Rate	**Fl oz (lb ai) Spartan Charge per acre**		
	Soil Texture		
% Organic Matter	**Coarse**	**Medium**	**Fine**
<1.5	3.8(0.1)-5.7(0.16)	3.8(0.10)-5.7(0.16)	4.8(0.13)-6.7(0.18)
1.5-3.0	3.8(0.10)-5.7(0.16)	4.8(0.13)-7.6(0.21)	5.7(0.16)-7.6(0.21)
>3	5.7(0.16)-7.6(0.21)	6.7(0.18)-8.6(0.23)	7.6(0.21)-10.2(0.28)
*Refer to the previous information on soil types under the COARSE, MEDIUM, and FINE categories Use higher rates for soils of pH less than 7.0 and lower rates for pH greater than 7.0 within the rate range.			

Ground and Aerial Applications (30.1)
Apply Spartan Charge by aerial application as a preemergence treatment following planting and after dragoff, but prior to potato emergence. Optimum performance can be achieved if Spartan Charge 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 4 above. For control of emerged weeds at the time of the Spartan application, an appropriate burndown herbicide and adjuvants labeled for potatoes

may be tankmixed with Spartan to control these weeds. Do not apply Spartan Charge if the potatoes have emerged from the soil as undesirable crop response may occur. Spartan Charge may be tankmixed with other soil-applied herbicides labeled for use in potatoes to improve weed management and increase weed control spectrum.

Apply Spartan Charge in a minimum of 10 gallons of spray by ground application and 5 gallons of spray by air.

Chemigation Applications (30.2)

Spartan Charge may be applied to potatoes through sprinkler irrigation systems including center pivot, lateral move, end tow, solid set or hand move irrigation systems. Apply Spartan Charge prior to potato emergence using sufficient water (0.25 to 0.5 inch per acre) to provide thorough soil surface coverage, but to avoid runoff of irrigation water. Spartan Charge may be applied with other products labeled for chemigation use in potatoes.

It is important to note that irrigation with highly alkaline water (high pH) following a Spartan Charge soil application may significantly increase the amount of sulfentrazone available in soil solution. Irrigation with water having a pH greater than 7.5 could result in adverse crop response. This response will ultimately depend on initial Spartan Charge 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, Spartan Charge will provide control of:

Amaranth, Palmer	Nightshade, Eastern black
Filaree, redstem	Pigweed, redroot
Kochia (ALS and Triazine Resistant)	Pigweed, smooth
Lambsquarters, common	Thistle, Russian
Morningglory, ivyleaf	Waterhemp, common
Morningglory, tall	Waterhemp, tall

Also control all those weeds which are susceptible to carfentrazone application.

For information on other weeds not listed above, refer to Weed Controlled section (Table 6) in this label.

Precautions

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

These Crop Specific Use directions are based upon the interactive effects of Spartan Charge (sulfentrazone and carfentrazone) 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 General Application Instructions, General Spartan Charge 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 Spartan Charge. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on Spartan Charge under specific local conditions.

Restrictions

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

Do not apply Spartan Charge after potato emergence from the soil as undesirable crop response may occur.

Do not apply more than 10.2 fluid ounces per acre per twelve-month period. The twelve-month period is considered to begin upon the initial Spartan application.

SOYBEANS (31) (Food, feed and Industrial)

Preplant Burndown, Early Preplant, and Preemergence Applications (see Table 5 for application rates).

Apply SPARTAN CHARGE alone or with other herbicides or liquid fertilizers as a burndown or preemergence treatment prior to planting or within 3 days after planting soybeans to control or suppress weeds using rates in Table 5. Properly closed seed furrows are required when applying at planting time or before seed germination. When planting into soil treated preplant with SPARTAN CHARGE, minimize soil disturbance to maintain the herbicide barrier on the soil surface to achieve maximum weed control.

Optimum broad-spectrum control of annual and perennial weeds requires a tank mix with a broad-spectrum burndown herbicide such as glyphosate, glufosinate, or paraquat. When tank mixing SPARTAN CHARGE with other products, be sure the SPARTAN CHARGE is added to the spray tank water first. For specific mixing instructions refer to the Mixing and Loading instructions section of this label.

Table 5

SPARTAN CHARGE Use Rate Table (Soybeans)
Preplant Burndown, Early Preplant, and Preemergence

Broadcast Rate	Fl oz SPARTAN CHARGE per acre		
	Soil Texture		
% Organic Matter	Coarse	Medium	Fine
<1.5	5.75-7.75	7.75-8.5	8.5
1.5-3	7.75-8.5	8.5	8.5
>3	8.5	8.5	8.5

Refer to the previous information on soil types under the COARSE, MEDIUM, and FINE categories
Use higher rates for soils of pH less than 7.0 and lowest rate for pH greater than 7.0 within the rate range.

Precautions

When applying SPARTAN CHARGE with other registered herbicides, refer to specific label information on precautions, instructions, limitations, application methods and timings, and weeds controlled.

SPARTAN CHARGE is especially effective against a wide range of economic broadleaf weeds. The same processes that SPARTAN CHARGE affects in these weeds can, under certain conditions, be affected in soybeans. These conditions include high pH (7.5 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 a return to normal growing conditions. **Thorough coverage is essential for control of small susceptible broadleaf weeds.** If thorough coverage is not achieved, postemergent weed control will be poor.

When used as directed, SPARTAN CHARGE will provide preemergent control of the following weeds (refer to section 27 for postemergent weeds controlled):

BROADLEAVES	
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	*Amaranthus, spinosus*
Amaranth, spleen	*Amaranthus dubius*
Jimsonweed	*Datura stramonium*
Kochia	*Kochia scoparia*
Lambsquarters, common	*Chenopodium album*
Morningglory, Entireleaf	*Ipomea hederacea integriusc*
Morningglory, Ivyleaf	*Ipomea hederacea hederacea*
Morningglory, Palmleaf	*Ipomea Wrightii*
Morningglory, purple	*Ipomea turbinata*
Morningglory, red	*Ipomea coccinea*
Morningglory, scarlet	*Ipomea hederifolia*
Morningglory, Smallflower	*Jacquemontia tamnifolia*
Morningglory, tall	*Ipomea, purpurea*
Nightshade, black	*Solanum nigrum*
Nightshade, Eastern black	*Solanum americanum*
Pigweed, redroot	*Amaranthus retroflexus*
Pigweed, smooth	*Amaranthus hybridus*
Smartweed, PA (seedling)	*Polygonum pensylvanicum*
Thistle, Russian	*Lactuca serriola*
Waterhemp, common	*Amaranthus rudis*
Waterhemp, tall	*Amaranthus tuberculatos*
SEDGES	
Nutsedge, purple	*Cyperus rotundus*
Nutsedge, yellow	*Cyperus esculentus*
Sedge, annual	*Cares* spp.

Restrictions

Do not apply SPARTAN CHARGE Herbicide after crop emergence, or if the seedling is close to the soil surface, as undesirable crop response may occur.

Do not apply more than 8.5 fluid ounces per acre of SPARTAN CHARGE per twelve-month period. The twelve-month period is considered to begin upon the initial SPARTAN CHARGE 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 SPARTAN CHARGE runoff from rain or snowmelt that may occur following application. Do not apply after crop seed germination.

SUGARCANE (32)

Table 6

Spartan Charge Use Rate Table (Sugarcane) Planting Time and Lay-by Applications			
Broadcast Rate	**Fl Oz (lb ai) per acre**		
	Soil Texture		
% Organic Matter	**Coarse**	**Medium**	**Fine**
<1.5	5.7 (0.16)-7.6(0.21)	7.6(0.21)-10.2(0.28)	10.2(0.28)
1.5-3	7.6(0.21)-10.5(0.29)	10.2(0.28)-12.8(0.35)	12.8(0.35)
>3	10.2(0.28)-12.8(0.35)	12.8(0.35)-15.2(0.42)	15.2(0.42)

Refer to the previous information on soil types under the COARSE, MEDIUM, and FINE categories Use higher rates for soils of pH less than 7.0 and lower rates for pH greater than 7.0 within the rate range.

Apply Spartan Charge as a broadcast or banded preemerge soil applied treatment for the control of broadleaf weeds, grasses and sedges in sugarcane. Refer to the Spartan Charge Product Use Rate Section and Table 6 for specific use information.

Planting Time Applications (32.1)
Apply Spartan Charge 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. Spartan Charge may be applied with other herbicides registered for use in sugarcane.

Aerial Applications (32.2)
Spartan Charge may be applied by air in a minimum of 5 gallons of finished spray per acre. Spartan Charge may be applied with other herbicides or insecticides registered for aerial application in sugarcane.

Lay-by Applications (32.3)
Apply Spartan Charge 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 15 gallons of spray per acre. Spartan Charge may be applied with other herbicides registered for use in sugarcane.

Weeds Controlled
When applied according to directions, Spartan Charge will provide control of:

Morninglory, entireleaf	Morningglory, tall
Morningglory, ivyleaf	Pigweed, red root
Morningglory, red	Nutsedge, yellow

For information on other weeds not listed above, refer to Weed Controlled section (27) in this label.

Precautions
These Crop Specific Use directions are based upon the interactive effects of Spartan Charge (sulfentrazone + carfentrazone) 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 General Application Instructions, General Spartan Charge 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 Spartan Charge. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on Spartan Charge under specific local conditions.

Restrictions
Pre-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 15.2 fluid ounces per acre of Spartan Charge per acre per twelve-month period. The twelve-month period is considered to begin upon the initial Spartan application.

SUNFLOWERS (33)

Fall Application, Preplant Burndown, Early Preplant, and Preemergence Applications (see Table 7 for application rates)

Fall Application
SPARTAN CHARGE may be applied in the fall following crop harvest or in existing fallow fields to control or suppress weeds the following season. The SPARTAN CHARGE Rotational Crop Guidelines in Section 25 must be followed if crops are planted the next season. SPARTAN CHARGE 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 SPARTAN CHARGE runoff from rain or snow that may occur following application. SPARTAN CHARGE may be tank mixed with herbicides to control emerged weeds. Sequential applications may be needed depending on weed size. In situations where weed size may interfere with SPARTAN CHARGE reaching the soil surface, a separate burndown application prior to the application of SPARTAN CHARGE will be required. Use full, recommended rates of burndown herbicides in combination with SPARTAN CHARGE, or sequential applications as needed. Higher aerial spray volumes are required when there is a dense weed population or canopy.

SPARTAN CHARGE can be tank mixed 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.

Preplant Burndown, Early Preplant, and Preemergence Applications

Apply SPARTAN CHARGE alone or with other herbicides or liquid fertilizers as a burndown or preemergence treatment prior to planting or up to 3 days after planting sunflowers to control or suppress weeds using rates in table 7. Properly closed seed furrows are required when applying at planting time or before seed germination. When planting into soil treated preplant with SPARTAN CHARGE, minimize soil disturbance to maintain the herbicide barrier on the soil surface to achieve maximum weed control.

Optimum broad-spectrum control of annual and perennial weeds requires a tank mix with a broad-spectrum burndown herbicide such as glyphosate, glufosinate, or paraquat. When tank mixing SPARTAN CHARGE with other products be sure the SPARTAN CHARGE is added to the spray tank water first. For specific mixing instructions refer to the Mixing and Loading instructions section of this label.

Table 7

SPARTAN CHARGE Use Rate Table (Sunflowers)			
Fall Preplant Burndown Early Preplant and Preemergence			
Broadcast Rate	**Fl oz (lb ai) SPARTAN CHARGE per acre**		
	Soil Texture		
/ Organic Matter	**Coarse**	**Medium**	**Fine**
<1 5	3 8(0 10) 5 0(0 14)	3 8(0 10) 5 75(0 16)	5 0(0 14) 6 7(0 18)
1 5 3 0	3 8(0 10) 5 75(0 16)	5 0(0 14) 7 75(0 21)	5 75(0 16) 8 6(0 23)
>3	5 0(0 14) 7 75(0 21)	5 75(0 16) 8 6(0 23)	7 75(0 23) 10 2(0 28)
Refer to the previous information on soil types under the COARSE MEDIUM and FINE categories Use higher rates for soils of pH less than 7 0 and lowest rate for pH greater than 7 0 within the rate range			

Precautions
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 hill tops or in areas of calcareous outcroppings SPARTAN CHARGE use rates should be reduced or SPARTAN CHARGE should not be used 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 SPARTAN CHARGE 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 General Application Instructions General SPARTAN CHARGE 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 SPARTAN CHARGE Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on SPARTAN CHARGE under specific local conditions

Thorough coverage is essential for control of small susceptible broadleaf weeds If thorough coverage is not achieved postemergent weed control will be poor Optimum broad spectrum control of annual and perennial weeds requires a tank mix of with a broad spectrum burndown herbicide such as glyphosate glufosinate or paraquat

If adequate moisture (1/2 to 1 of rainfall or irrigation) is not received within 7 to 10 days and also if dry conditions persist throughout the growing season erratic preemergent weed control may result Additional moisture is needed throughout the growing season to maintain herbicide activity and prevent weed escapes

When used as directed SPARTAN CHARGE will provide preemergent control of the following weeds (refer to section 27 for postemergent weeds controlled)

Amaranth Palmer	Pigweed red root
Filaree 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	

Restrictions
Do not apply SPARTAN CHARGE Herbicide after crop emergence or if the seedling is close to the soil surface as undesirable crop response may occur

Do not apply more than 10 2 fluid ounces per acre of SPARTAN CHARGE per twelve month period The twelve month period is considered to begin upon the initial SPARTAN CHARGE 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 SPARTAN CHARGE runoff from rain or snowmelt that may occur following application

DRY SHELLED BEANS AND PEAS (34)

Dried cultivars of bean (*Lupinus*) bean (*Phaseolus*)(includes field bean kidney bean lima bean (dry) navy bean pinto bean tepary bean) bean (*Vigna*) (includes adzuki bean blackeyed pea catjang cowpea crowder pea moth bean lentil mung bean rice bean southern pea urd bean) broad bean (dry) chickpea guar lab lab bean pea (*Pisum*) (includes dry field pea) and pigeon pea **(see Table 8 for application rates)**

Fall Applications
SPARTAN CHARGE may be applied in the fall as a preplant treatment to control or suppress weeds prior to planting the following spring SPARTAN CHARGE 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 SPARTAN CHARGE runoff from rain or snow melt that may occur following application SPARTAN CHARGE 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 SPARTAN CHARGE application use a burndown herbicide such as glyphosate or paraquat at the full labeled rate in combination with SPARTAN CHARGE or split application as

needed Select the appropriate rate from the table below within the correct soil type and organic matter range When applying SPARTAN CHARGE in the fall use a mid to high rate within the rate range for the appropriate soil type and organic matter

Preplant Burndown Early Preplant and Preemergence Applications
Apply SPARTAN CHARGE alone or with other herbicides or liquid fertilizers as a burndown or preemergence treatment prior to planting or up to 3 days after planting dry shelled peas and beans to control or suppress weeds Properly closed seed furrows are required when applying at planting time When planting into soil treated preplant with SPARTAN CHARGE minimize soil disturbance to maintain the herbicide barrier on the soil surface to achieve maximum weed control

Optimum broad spectrum control of annual and perennial weeds requires a tank mix with a broad spectrum burndown herbicide such as glyphosate glufosinate or paraquat When tank mixing SPARTAN CHARGE with other products be sure the SPARTAN CHARGE is added to the spray tank water first For specific mixing instructions refer to the Mixing and Loading instructions section of this label

Table 8

SPARTAN CHARGE Use Rate Table (Dry Shelled Beans and Peas)

Fall Preplant Burndown Early Preplant and Preemergence

Broadcast Rate	**Fl oz (lb ai) SPARTAN CHARGE per acre**		
	Soil Texture		
/ Organic Matter	**Coarse**	**Medium**	**Fine**
<1 5 /	3 0(0 08) – 3 75(0 10)	3 75(0 1) – 5 75(0 16)	3 75(0 10) – 5 75(0 16)
1 5 3 0 /	3 75(0 10) – 5 75(0 16)	5 0(0 14) – 7 75(0 21)	5 75(0 16) – 7 75(0 21)
>3 0 /	5 0(0 14) – 7 75(0 21)	5 75(0 16) – 8 6(0 23)	6 7(0 18) – 10 2(0 28)

Refer to the previous information on soil types under the COARSE MEDIUM and FINE categories
Use higher rates for soils of pH less than 7 0 and lowest rate for pH greater than 7 0 within the rate range

Precautions
Best results are achieved with SPARTAN CHARGE 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 (such as hilltops) or in areas of calcareous outcroppings SPARTAN CHARGE use rates should be reduced or SPARTAN CHARGE should not be used 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 SPARTAN CHARGE 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 General Application Instructions General SPARTAN CHARGE 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 SPARTAN CHARGE Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on SPARTAN CHARGE under specific local conditions

Thorough coverage is essential for control of small susceptible broadleaf weeds If thorough coverage is not achieved postemergent weed control will be poor Optimum broad spectrum control of annual and perennial weeds requires a tank mix of with a broad spectrum burndown herbicide such as glyphosate glufosinate or paraquat

If adequate moisture (1/2 to 1 of rainfall or irrigation) is not received within 7 to 10 days and also if dry conditions persist throughout the growing season erratic preemergent weed control may result Additional moisture is needed throughout the growing season to maintain herbicide activity and prevent weed escapes

When used as directed SPARTAN CHARGE will provide preemergent control of the following weeds (refer to section 27 for postemergent weeds controlled)

Amaranth Palmer	Pigweed red root
Filaree 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	

Restrictions
Do not apply SPARTAN CHARGE Herbicide after crop emergence or if the seedling is close to the soil surface as undesirable crop response may occur

Do not apply more than 10 2 fluid ounces per acre per twelve month period The twelve month period is considered to begin upon the initial SPARTAN CHARGE application

Do not use on soils classified as sand which have less than 1 / organic matter

Do not apply to frozen soils or to existing snow cover to prevent SPARTAN CHARGE runoff from rain or snow melt that may occur following application

LIMA BEANS, SUCCULENT (Tennessee Only) (35)

Preplant Burndown Early Preplant and Preemergence Applications (see Table 9 for application rates)

Apply SPARTAN CHARGE alone or with other herbicides or liquid fertilizers as a burndown or preemergence treatment prior to planting lima beans to control or suppress weeds Properly closed seed furrows are required when applying at planting time or before seed germination When planting into soil treated preplant with SPARTAN CHARGE minimize soil disturbance to maintain the herbicide barrier on the soil surface to achieve maximum weed control

For applications 14 21 or more days prior to planting use the mid to high rate in the appropriate rate range for the soil and organic matter type in Table 9 Optimum broad spectrum control of annual and perennial weeds requires a tank mix with a broad spectrum burndown herbicide such as glyphosate glufosinate or paraquat When tank mixing SPARTAN CHARGE with other products be sure the SPARTAN CHARGE is added to the spray tank water first For specific mixing instructions refer to the Mixing and Loading instructions section of this label (section 20)

Table 9

SPARTAN CHARGE Use Rate Table (Lima Beans Succulent) Preplant Burndown Early Preplant and Preemergence			
Broadcast Rate	**Fl oz (lb ai) SPARTAN CHARGE per acre**		
	Soil Texture		
/ Organic Matter	**Coarse**	**Medium**	**Fine**
<1 5 /	3 0(0 08) 5 0 (0 14)	3 8(0 10) 7 75(0 21)	4 8(0 13) 7 75(0 21)
1 5 – 3 0 /	3 8(0 10) 5 75(0 16)	5 0(0 14) 7 75(0 21)	5 7(0 16) 7 75(0 21)
>3 0 /	5 0(0 14) 7 75(0 21)	5 75(0 16) 7 75(0 21)	6 7(0 18) 7 75(0 21)
Refer to the previous information on soil types under the COARSE MEDIUM and FINE categories Use higher rates for soils of pH less than 7 0 and lowest rate for pH greater than 7 0 within the rate range			

Precautions

When applying SPARTAN CHARGE to coarse textured soils growers must allow a minimum of 7 14 days from application to planting Best results are achieved with SPARTAN CHARGE 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 /) and pH of 7 8 or higher or on highly eroded soils or in areas of calcareous outcroppings SPARTAN CHARGE 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 SPARTAN CHARGE 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 General Application Instructions General SPARTAN CHARGE 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 SPARTAN CHARGE Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on SPARTAN CHARGE under specific local conditions

Thorough coverage is essential for control of small susceptible broadleaf weeds If thorough coverage is not achieved postemergent weed control will be poor Optimum broad spectrum control of annual and perennial weeds requires a tank mix of with a broad spectrum burndown herbicide such as glyphosate glufosinate or paraquat

When used as directed SPARTAN CHARGE will provide preemergent control of the following weeds (refer to section 27 for postemergent weeds controlled)

Copperleaf hophornbeam	Pigweed redroot
Morningglory entireleaf	Pigweed smooth
Morningglory Ivyleaf	

Restrictions

Do not apply SPARTAN CHARGE Herbicide after crop emergence or if the seedling is close to the soil surface as undesirable crop response may occur

Do not apply more than 7 75 fluid ounces per twelve month period The twelve month period is considered to begin upon the initial SPARTAN CHARGE application

Do not use on soils classified as sand which have less than 1 / organic matter

Do not apply to frozen soils or to existing snow cover to prevent SPARTAN CHARGE runoff from rain or snow melt that may occur following application

Do not harvest forage or feed forage to livestock

TOBACCO (Burley Flue Cured and Dark) (36)

Table 10

Spartan Charge Use Rate Table (Tobacco) Preemergence and Preplant Incorporated Applications			
Broadcast Rate	**Fl oz (lb ai) Spartan Charge per acre**		
	Soil Texture		
/ Organic Matter	**Coarse**	**Medium**	**Fine**
<1 5	5 7 (0 16) 7 6(0 21)	7 6(0 21) 10 2(0 28)	10 2(0 28)
1 5 3 0	7 6(0 21) 10 2(0 28)	10 2(0 28) 12 8(0 35)	12 8(0 35)
>3	10 2(0 28) 12 8(0 35)	12 8(0 35) 15 2(0 42)	15 2(0 42)
Refer to the previous information on soil types under the COARSE MEDIUM and FINE categories Use higher rates for soils of pH less than 7 0 and lower rates for pH greater than 7 0 within the rate range			

Spartan Charge 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 Spartan Charge deeper than 2 inches can result in inconsistent weed control
Broadcast apply the appropriate Spartan Charge rate from Table 10 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 Spartan Charge Once the field has been prepared for planting Spartan Charge may be surface applied or lightly preplant incorporated from 14 days to 12 hours prior to transplanting
If Spartan Charge 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 pre transplant surface application reduced/unacceptable weed control may occur in the drill

Bedded (Fields where raised beds ARE formed PRIOR to transplanting)
Apply Spartan Charge 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 Spartan Charge application
When incorporating prior to bedding Spartan Charge must be thoroughly and uniformly incorporated to a depth no greater than 2 inches to avoid concentrating Spartan Charge 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 Spartan Charge 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 Spartan Charge will provide control of
Filaree redstem
Amaranthus livid
Galinsoga hairy
Lambsquarters common
Morningglory ivyleaf
Morningglory tall
Pigweed redroot
Pigweed smooth
Sida prickly
Signalgrass broadleaf
Smartweed Pennsylvania

PEANUTS (37)

Southeastern United States Only (AL GA, MS NC SC VA)

Preplant Burndown Early Preplant and Preemergence Applications (see Table 11 for application rates)
Apply SPARTAN CHARGE alone or with other herbicides or liquid fertilizers as a burndown or preemergence treatment prior to planting or within 3 days after planting peanuts to control or suppress weeds using rates in Table 11 Properly closed seed furrows are required when applying at planting time or before seed germination When planting into soil treated preplant with SPARTAN CHARGE minimize soil disturbance to maintain the herbicide barrier on the soil surface to achieve maximum weed control

Optimum broad-spectrum control of annual and perennial weeds requires a tank mix with a broad-spectrum burndown herbicide such as glyphosate, glufosinate, or paraquat. When tank mixing SPARTAN CHARGE with other products, be sure the SPARTAN CHARGE is added to the spray tank water first. For specific mixing instructions refer to the Mixing and Loading instructions section of this label.

Table 11

SPARTAN CHARGE Use Rate Table (Peanuts)

Fall, Preplant Burndown, Early Preplant, and Preemergence

Broadcast Rate	Fl oz (lb ai) SPARTAN CHARGE per acre*		
	Soil Texture		
% Organic Matter	Coarse	Medium	Fine
<1.5%	3.0(0.08) – 3.75(0.10)	3.75(0.10) – 5.75(0.16)	3.75(0.10) – 5.75(0.16)
1.5-3.0 %	3.75(0.10) – 5.75(0.16)	5.0(0.14) – 7.75(0.21)	5.75(0.16) – 7.75(0.21)
>3.0 %	5.0(0.14) – 7.75(0.21)	5.75(0.16) – 7.75(0.21)	6.5(0.18) – 10.2(0.28)

Refer to the previous information on soil types under the COARSE, MEDIUM, and FINE categories

Use higher rates for soils of pH less than 7.0 and lowest rate for pH greater than 7.0 within the rate range.

Precautions

When applying SPARTAN CHARGE with other registered herbicides, refer to specific label information on precautions, instructions, limitations, application methods and timings, and weeds controlled.

SPARTAN CHARGE is especially effective against a wide range of economic broadleaf weeds. The same processes that SPARTAN CHARGE affects in these weeds can, under certain conditions, be affected in peanuts. These conditions include high pH (7.5 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 peanuts 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 a return to normal growing conditions. **Thorough coverage is essential for control of small susceptible broadleaf weeds.** If thorough coverage is not achieved, postemergent weed control will be poor

When used as directed, SPARTAN CHARGE will provide preemergent control of the following weeds (refer to section 27 for postemergent weeds controlled):

BROADLEAVES	
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	*Amaranthus, spinosus*
Amaranth, spleen	*Amaranthus dubius*
Jimsonweed	*Datura stramonium*
Kochia	*Kochia scoparia*
Lambsquarters, common	*Chenopodium album*
Morningglory, Entireleaf	*Ipomea hederacea integriusc*
Morningglory, Ivyleaf	*Ipomea hederacea hederacea*
Morningglory, Palmleaf	*Ipomea Wrightii*
Morningglory, purple	*Ipomea turbinata*
Morningglory, red	*Ipomea coccinea*
Morningglory, scarlet	*Ipomea hederifolia*
Morningglory, Smallflower	*Jacquemontia tamnifolia*
Morningglory, tall	*Ipomea, purpurea*
Nightshade, black	*Solanum nigrum*
Nightshade, Eastern black	*Solanum americanum*
Pigweed, redroot	*Amaranthus retroflexus*
Pigweed, smooth	*Amaranthus hybridus*
Smartweed, PA (seedling)	*Polygonum pensylvanicum*
Thistle, Russian	*Lactuca serriola*
Waterhemp, common	*Amaranthus rudis*
Waterhemp, tall	*Amaranthus tuberculatos*
SEDGES	
Nutsedge, purple	*Cyperus rotundus*
Nutsedge, yellow	*Cyperus esculentus*
Sedge, annual	*Cares* spp.

Restrictions

Do not apply SPARTAN CHARGE Herbicide after crop emergence, at cracking, or if the seedling is close to the soil surface, as undesirable crop response may occur.

Do not apply more than 10.2 fluid ounces per acre of SPARTAN CHARGE per twelve-month period. The twelve-month period is considered to begin upon the initial SPARTAN CHARGE 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 SPARTAN CHARGE runoff from rain or snowmelt that may occur following application. Do not apply after crop seed germination.

Do not feed treated peanut forage or peanut hay to livestock.

Do not irrigate with water having a pH higher than 7.5.

CABBAGE (Transplanted Only) (38)

Table 12

Spartan Charge Use Rate Table (Cabbage) Fall or Spring Early Preplant, Preemergence, and Preplant Incorporated Applications			
Broadcast Rate	**Fl oz (lb ai) Spartan Charge per acre**		
	Soil Texture		
% Organic Matter	**Coarse**	**Medium**	**Fine**
<1.5%	2.9(0.08)-3.8(0.10)	3.8(0.10)-5.7(0.16)	3.8(0.10)-7.6(0.21)
1.5-3.0 %	3.8(0.10)-7.6(0.21)	7.6(0.21)-11.4(0.31)	7.6(0.21)-11.4(0.31)
>3.0 %	7.6(0.21)-11.4(0.31)	7.6(0.21)-15.2(0.42)	7.6(0.21)-15.2(0.42)
Refer to the previous information on soil types under the COARSE, MEDIUM, and FINE categories. Use higher rates for soils of pH less than 7.0 and lower rates for pH greater than 7.0 within the rate range.			

Early Preplant (Fall Application or Spring Application) (38.1)

Spartan Charge may be applied in the states of MN, ND, SD, MT, CO, NE, WY, ID, WA, OR, WI, or MI only in the fall or spring preceding the growing season to control weeds prior to or up to the planting or transplanting of cabbage. Spartan Charge may be applied in the spring from 60 days prior to planting up to planting time. Spartan Charge 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 Spartan Charge runoff from rain or snow that may occur following application. Spartan Charge 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 full, recommended rates of burndown herbicides in combination with Spartan Charge, 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) (38.2)

Spartan Charge 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. Spartan Charge can be tankmixed with other burndown or soil-applied herbicides labeled for use in cabbage. Use the full, recommended 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.

Transplant Cabbage (38.3)

Spartan Charge may be applied pre-emergence as a broadcast or banded treatment to transplanted cabbage only. Applications should be made broadcast or banded treatment prior to transplanting. Spartan Charge may be applied as a banded treatment into the row middles within 72 hours after transplanting.

Weeds Controlled

When Applied according to directions, Spartan Charge will 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 (27) in this label.

Precautions

These Crop Specific Use directions are based upon the interactive effects of Spartan Charge (sulfentrazone and carfentrazone) 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 General Application Instructions, General Spartan Charge 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 Spartan Charge. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on Spartan Charge under specific local conditions.

Restrictions

Do not apply more than 15.2 fluid ounces per acre of Spartan Charge per application or per twelve-month period. The twelve-month period is considered to begin upon the initial Spartan 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.

Pre-harvest Interval (PHI): 80 days

HORSERADISH (39)

Table 13

Spartan Charge Use Rate Table (Horseradish) Fall or Spring Early Preplant Preemergence and Preplant Incorporated Applications			
Broadcast Rate	**Fl oz (lb ai) Spartan Charge per acre**		
	Soil Texture		
/ Organic Matter	**Coarse**	**Medium**	**Fine**
<1 5 /	2 9(0 08) 5 7(0 16)	3 8(0 10) 5 7(0 16)	3 8(0 10) 5 7(0 16)
1 5 3 0 /	5 7(0 16) 7 6(0 21)	7 6(0 21) 10 2(0 28)	7 6(0 21) 10 2(0 28)
>3 0 /	7 6(0 21) 9 8(0 27)	7 6(0 21) 10 2(0 28)	7 6(0 21) 10 2(0 28)
Refer to the previous information on soil types under the COARSE MEDIUM and FINE categories Use higher rates for soils of pH less than 7 0 and lower rates for pH greater than 7 0 within the rate range			

Spartan Charge 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) (MN ND SD MT CO NE WY ID WA, OR WI MI) (39 1)

Spartan Charge 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 Spartan Charge may be applied in the spring from 60 days prior to planting up to planting Spartan Charge 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 may occur Do not apply to frozen soils to prevent Spartan runoff from rain or snow that may occur following application Spartan Charge 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 full recommended rates of burndown herbicides in combination with Spartan Charge 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) (39 2)

Spartan Charge 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 Spartan Charge may be tankmixed with other burndown or soil applied herbicides labeled for use on horseradish Use the full recommended 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

Pre Emergence (PRE) (39 3)

Spartan Charge 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 Spartan Charge may be applied as a banded treatment into the row middles after crop emergence Use the higher Spartan Charge rates on clay soils and/or soils with greater than 1 / organic matter Spartan Charge may be applied with other pesticides registered for use on horseradish

Weeds Controlled

When applied according to directions Spartan Charge 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 Weed Controlled section (Table 6) in this label

Precautions

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

Restrictions

Do not apply more than 10 2 fluid ounces per acre of Spartan Charge per application or per twelve month period The twelve month period is considered to begin upon the initial Spartan 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

Do not incorporate to depths greater than 2 inches

SOD PRODUCTION (40)

Spartan Charge may be applied to established seeded sodded or sprigged turfgrasses following the second mowing 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 Sod injury could result from application of this product on sod that is not well established or has been weakened by stresses such as unfavorable weather conditions diseases chemical recent harvesting or mechanical influences

Turf Grass Tolerance
When applied as directed the following established turf grasses are tolerant to Spartan Charge herbicide at the listed use rates

Table 14 Tolerant grasses

Grass Type	Maximum Use Rate For Single Application
Cool Season Grasses	Fl oz (lb ai) Spartan Charge Per Acre
Bentgrass creeping	5 1 (0 14)
Fescue fine (Festuca rubra) Fescue tall (Festuca arund nacea) Ryegrass perennial (Lolium perenne Bluegrass Kentucky (Poa pratensis) Bluegrass, Ro gh (Poa trivialis)	5 1(0 14) 10 2(0 28)
Warm Season Grasses	
Bahiagrass (Paspalum notatum) Buffalograss (Buchloe dactyloides) Carpetgrass (Axonopus affinis) Centipedegrass (Eremochloa ophu o des) Kikuyugrass (Pennisetum clandestinum) Seashore Paspal m (Paspalum vaginatum) Zoysiagrass (Zoysia japonica) Bermudagrass (Cynadon dactylon) Bermudagrass Hybnds (Cyn Bluegrass St Augustinegrass (Stenotaphrum secundatum)	10 2(0 28) 15 2(0 42)

Applications of Spartan Charge to certa n va et es of Chewings Fine Fesc e or Tall Fesc e may result in undes rable pla t sponse

It is important to note that not all varieties or cultivars have been evaluated under treatment with Spartan Charge Consult univers ty or extension weed management specialists for add t onal information on specific local variet es or cult vars and any other pert nent information on Spartan Charge under specific local conditions

Applications to Reseeded Overseeded or Sprigged Areas
Reseeding overseeding or sprigging may be done following Spartan Charge applications to turfgrasses If reseeding overseeding or sprigging is done within 1 month following a Spartan Charge treatment the establishment of desirable grasses may be inhibited Overseeding of bermudagrass with perennial ryegrass may be done two (2) to four (4) weeks following a Spartan Charge application provided slight grass plant response can be tolerated

Optimum 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
Spartan Charge 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 Spartan Charge use rate from Table 14

When applied as directed Spartan Charge will provide control or suppression of the following sedges
Table 15

Common Name	Scientific Name
Kyllinga, green	*Kyllinga brev folia*
Kullinga, false green	*Kyllinga gracill ma*
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 split applications are listed below Apply 4 8 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 14 tolerant grasses

Split Application Rates for Optimum Purple Nutsedge Control

Grass Type	First Application (fl oz (lb ai) per acre)	Second Application (fl Oz (lb ai) per acre
Cool S ason Grasses	2 5(0 07) 5 1(0 14)	2 5(0 07) 7 6(0 21)
Warm Season Grasses	5 1(0 14) 7 6(0 21)	5 1(0 14) 7 6(0 21)

Allow 35 days after first application for second application

Postemergence Control of Grassy Weeds
Spartan Charge will control or suppress specific annual grasses (Table 16) 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 14 Rates lower than 12 fl oz/acre will generally control grasses for at least 60 days Spartan Charge works best if applied when the annual grasses are small (pre tiller stage) and actively growing

Table 16

Common Name	Scientific Name
Goosegrass	*Eleusine indica*

Postemergence Control of Broadleaf Weeds

Spartan Charge herbicide will control or suppress the weeds listed in the broadleaf chart below when applied alone shortly after weeds have emerged Spartan Charge 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 Spartan Charge use rate from Table 14 For optimum results Spartan applications should be made shortly after weeds have emerged

Spartan Charge 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 specie tolerance use rates and application requirements Follow all label restrictions use directions and precautionary statements before use

When applied as directed Spartan Charge will provide control or suppression of the following broadleaf weeds

Broadleaves	***Scientific Names***
B tte c ess	*Cardamine spp*
Black Med c	*Medicago lupul na*
Buttercup	*Ranunculus spp*
Carolina geranium	*Geranium carolin anum*
Carpetweed	*Mollugo verticillata*
Chickweed common	*Stellana media*
Chickweed mousear	*Cerastium vulgatum*
Cinquefoil	*Potentilla spp*
Clover	*Trifolium spp*
Cudweed	*Gnaphalium spp*
Dandelion	*Taraxacum officinale*
Dock, curly	*Rumex crispus*
Evening primrose	*Oenothera biennis*
Fiddleneck	*Amsinck a spp*
Filaree	*Erodium spp*
Garlic wild	*Allium vineale*
Goldenrod	*Sol dago spp*
Ground ivy	*Glechema hederasea*
Henbit	*Lamium amplex caule*
Knotweed, prostrate	*Polygo um av c lare*
Kochia	*Koch a scopana*
Lambsquarters, common	*Chenopodium album*
Lawn burweed	*Soliva pterosperma*
Lespedeza common	*Lespedeza stnata*
Mallow, common	*Mal a neglecta*
Onion wild	*Allium canadense*
Parsley piert	*Alchemilla arvensis*
Pigweed, redroot	*Amaranthus retroflexus*
Pigweed, tumble	*Amaranthus albus*
Pineapple weed	*Matricana matricanodes*
Plantain, buckhorn	*Plantago lanceolata*
Puncture weed	*Tribulus terrestris*
Purslane, common	*Portulaca oleracea*
P sley, Flor da	*Richardia scabra*
Redweed	*Melochia corchorifolia*
Rocket, London	*Sisymbrium irio*
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	*Ornithogalum umbellatum*
Velvetleaf	*Abutilon theophrasti*
V olet wild	*Viola pratincola*
Woodsorrel creeping	*Oxalis corniculata*
Woodsorrel yell w	*Oxal s stricta*

Precautions
The use of additional surfactants may cause temporary undesirable effects to turfgrasses

Restrictions
Sod production areas must be established three (3) months prior to the initial treatment of Spartan Charge

Do not apply Spartan Charge to golf course greens or tees

Do apply Spartan Charge to turf grasses not listed on this label

Do not apply with surfactants without on site evaluations for spray mixture compatibility and physical effects to turf grasses

Do not graze or feed forage harvested from Spartan Charge treated areas

Do not apply to landscape ornamental plants or ornamental beds

Do not harvest sod within three (3) months of Spartan Charge application

CITRUS FRUIT, TREE NUTS, GRAPES and BERRIES (41)

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 strawberry 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
Spartan Charge 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 xx

For best control Spartan Charge should be applied as a postemergence herbicide when weeds are present to eliminate emerged weeds

For broadcast applications a single application of Spartan Charge should be made at 7 7 to15 2 fl oz per acre (0 21 to 0 42 lb ai/A) Do not apply more than 15 2 fluid ounces (0 42 lb ai) per acre per twelve month period The twelve month period is considered to begin when the initial application of Spartan Charge is applied

For improved weed management Spartan Charge 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 Rage D Tech glyphosate paraquat Rely and 2 4 D Do not tank mix with Chateau® 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 Spartan Charge may be applied twice per year Do not apply more than 15 2 fl oz product (0 42 lb ai) per acre 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 / Row Width Feet	X	Broadcast Rate Per Acre	=	Band Rate
Band Width Feet	X	Broadcast Volume Per Acre	=	Band Volume

A minimum 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 5 0 and 9 0

Spartan Charge 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 1 2 year old 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 allows for sufficient time for Spartan Charge to dry on the weed foliage prior to irrigation or rainfall and the application is followed by at least ½ 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

Spartan Charge provides burndown and is a selective soil-applied herbicide for the control of susceptible broadleaf, grass and sedge weeds found in Tables 24 and 25. Adequate moisture of ½ to 1 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 ½ 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 Spartan Charge with a burndown herbicide and use an appropriate adjuvant when weeds are present at the time of application. Refer to the tank mix partner's product label for the proper use rates by weed sizes. Use the most restrictive label limitations and precautions of the tank mix product(s).

Residual weed control may be reduced when Spartan Charge 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 Spartan Charge 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

Table 24

Common Name	Scientific Name
Amaranth, livid	*Amaranthus lividus*
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, Powell	*Amaranthus Powell II*
Amaranth, spiny	*Amaranthus spinosus*
Amaranth, spleen	*Amaranthus dubius*
Anoda, spurred	*Anoda cristata*
Barnyardgrass, common	*Echinochloa crus-galli*
Bedstraw, catchweed	*Galium aparine*
Bindweed, field	*Convolvulus arvensis*
Bluegrass, annual	*Poa annua*
Bromegrass species	*Bromus spp.*
Burclover, California	*Medicago polymorpha*
Carpetweed	*Mollugo verticillata*
Cheatgrass	*Bromus tectorum*
Cheeseweed species	*Malva spp.*
Chickweed, common	*Stellaria media*
Clover species	*Trifolium spp.*
Copperleaf, hophornbeam	*Acalypha ostryeafolia*
Copperleaf, Virginia	*Acalypha virginica*
Crabgrass, large	*Digitaria sanguinalis*
Crabgrass, smooth	*Digitaria ischaemum*
Crabgrass, Southern	*Digitaria ciliaris*
Croton, tropic	*Croton glandulosus*
Crownbeard, golden	*Verbesina encelioides*
Cupgrass, wooly	*Erichloa villosa*
Cyperus, hedgehog	*Cyperus compressus*
Daisy, American	*Eclipta alba*
Devilsclaw	*Proboscidea louisiana*
Dock, curly	*Rumex crispus*
Eclipta	*Eclipta prostrata*
Eveningprimrose, cutleaf	*Oenothera laciniata*
Fescue, Red	*Fetuca rubra*
Fiddleneck speicies	*Amsinckia spp.*
Filaree, broadleaf	*Eroduim botrys*

Filaree, redstem	*Erodium cicutarium*
Filaree, whitestem	*Erodium moschatum*
Fleabane, hairy	*Conyza bonariensis*
Flixweed	*Descurainia sophia*
Foxtail, bristly	*Setari verticillata*
Foxtail, giant	*Setaria faberi*
Foxtail, green	*Setaria viridis*
Foxtail, yellow	*Setaria glauca*
Galinsoga, hairy	*Galinsoga ciliata*
Goosegrass	*Eleusine indica*
Goosefoot, nettleleaf	*Chenopodium murale*
Groundcherry, clammy (seedling)	*Physalis heterophylla*
Groundcherry, cutleaf	*Physalis angulata*
Groundsel, common	*Senecio vulgaris*
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 scoparia*
Ladysthumb	*Polygonum persicaria*
Lambsquarters, common	*Chenopodium album*
Lettuce, miners	*Montia perfoliata*
Lovegrass species	*Eragrostis spp.*
Mallow, common	*Malva neglecta wall r.*
Mallow, little	*Malva parviflora*
Mayweed, Chamomile	*Anthemis cotula l.*
Milkweed, honeyvine	*Ampelamus albidus*
Morningglory, entireleaf	*Ipomoea hederacea integriuscula*
Morningglory, ivyleaf	*Ipomoea hederacea hederacea*
Morningglory, palmleaf	*Ipomoea wrightii*
Morningglory, purple	*Ipomoea turbinata*
Morningglory, red	*Ipomoea, coccinea L.*
Morningglory, scarlet	*Ipomoea coccinea*
Morningglory, smallflower	*Jacquemontia tamnifolia*
Morningglory, tall	*Ipomoea, purpurea*
Mullein, turkey	*Eremocarpus setigerus*
Mustard, Species	*Brassica spp.*
Mustard, tumble	*Sisybrium 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*
Panicum, fall	*Panicum dichotomiflorum*
Pigweed, prostrate	*Amaranthus blitoides*
Pigweed, redroot	*Amaranthus retroflexus*
Pigweed, smooth	*Amaranthus hybridus*
Pigweed, Tumble	*Amaranthus albus*
Pineapple-weed	*Chamomilla suaveolens*
Plantain, blackseed	*Plantago rugelii decne*
Plantain, narrow-leaved	*Plantago lanceolata*
Poorjoe	*Diodia teres*
Porophyllum	*Porophyllum rederale*
Poinsettia, wild	*Euphorbia heterophylla*
Puncturevine	*Tribulus terrestris*
Purslane, common	*Portulaca oleracea*
Redmaids	*Calandrinia ciliata*
Redweed	*Melochia corchorifolia*
Radish, Wild	*Raphanus raphanistrum*
Rocket, London	*Sisymbrium irio*
Sandbur	*Cenchrus spinifer*
Sedge, annual	*Carex spp.*

Senna, coffee	*Cassia occidentalis*
Sheperdspurse	*Capsella bursa-pastoris*
Sida, prickly	*Sida spinosa*
Sida, Southern	*Sida acuta*
Signalgrass, broadleaf	*Brachiaria platyphylla*
Smartweed, PA (seedling)	*Polygonum pensylvanicum*
Smellmellon	*Cucumis melo*
Sowthistle species	*Sonchus spp.*
Srangletop, red	*Leptochloa filiformis*
Spurge, spotted	*Chamaesyce maculate*
Starbur, bristly	*Acanthospermum hispidum*
Stinkgrass	*Eragrostis cilianensis*
Toadflax, yellow	*Linaria vulgaris*
Tassleflower, red	*Emilio sonchifolia*
Thistle, Russian	*Salsola kali*
Waterhemp, common	*Amaranthus rudis*
Waterhemp, tall	*Amaranthus tuberculatos*
Waterprimrose, winged	*Ludwigia decurrens*
Willowleaf, panicle-leaf	*Epilobium brachycarpum*
Witchgrass	*Panicum capillare*

ANNUAL AND PERENNIALSEDGE CONTROL INCLUDING NUTSEDGE

Spartan Charge applied at 15.2 ounces per acre may provide control or suppression of sedges whether applied preemergence or postemergence. Postemergence application to sedges allows Spartan Charge 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 0.25% v/v when applying postemergence.

When applied as directed, Spartan Charge will provide control or suppression of the following sedges.

Table 25

Common Name	Scientific Name
Kyllinga, green	*Kyllinga brevifolia*
Kullinga, false green	*Kyllinga gracillima*
Nutsedge, purple	*Cyperus rotundus*
Nutsedge, yellow	*Cyperus esculentus*
Sedge, cylindrical	*Cyperus retrorsus*
Sedge, globe	*Cyperus globulosus*
Sedge, Surinam	*Cyperus surinamensis*
Sedge, Texas	*Cyperus polystachyos*

Optimum control of purple nutsedge may be obtained using split applications of Spartan Charge. Apply 5 – 7.7 ounces per acre followed by a second application to actively growing nutsedge. Do not exceed the maximum rate of 15.2 ounces (0.42 lb ai) per season. Spartan Charge symptoms on nutsedge will be observed as reduced nutsedge stands, necrosis, chlorosis, and/or stunting. Optimum control may not be observed until the second year after the original treatment.

REPLANTING IN NEW OR MATURE ORCHARDS AND VINEYARDS

Delay replanting at least 30 days after Spartan Charge applications when replacing trees and vines in established orchards. Use untreated soil when replanting trees and vines.

Precautions

These Crop Specific Use directions are based upon the interactive effects of Spartan Charge Herbicide and the primary soil and environmental factors, which affect its activity on various weed species and tolerance among crops. The user is required to observe the instructions and guidance previously presented under Product Application Instructions, Spartan Charge 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 Spartan Charge Herbicide. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on Spartan Herbicide 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 Spartan Charge using airblast sprayers or by air. Use ground equipment only.
- Do not apply more than 15.2 oz product (0.42 lb ai) per application or 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 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 injury warnings or restrictions
Pre harvest Interval (PHI) 3 days
If two banded treatments are made in a growing season allow a minimum of 60 days between applications however do not exceed the seasonal maximum use rate

LABEL TRACKING INFORMATION (43)

Label Code 072312

Philadelphia PA 19103 USA
FMC Corporation
Agricultural Products Group
1735 Market Street
Philadelphia PA 19103
215 299 6000

34/39

ACCEPTED
with COMMENTS
In EPA Letter Dated
SEP 28 2012
Under the Federal In t cide
Fungicide and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg No
279-3337

Supplemental Labeling

SPARTAN CHARGE HERBICIDE

EPA Reg No 279 3337

This supplemental label expires July 31 2015 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 SPARTAN CHARGE HERBICIDE according to this labeling is subject to the use precautions and limitations imposed by the label affixed to the container for SPARTAN CHARGE HERBICIDE

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 huilberry 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 strawberry 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

Spartan Charge 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 below

For best control Spartan Charge should be applied as a postemergence herbicide when weeds are present to eliminate emerged weeds

For broadcast applications a single application of Spartan Charge should be made at 7 7 to15 2 fl oz per acre (0 21 to 0 42 lb ai/A) Do not apply more than 15 2 fluid ounces (0 42 lb ai) per acre per twelve month period The twelve month period is considered to begin when the initial application of Spartan Charge is applied

For improved weed management Spartan Charge 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 Rage D Tech glyphosate paraquat Rely and 2 4 D Do not tank mix with Chateau® 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 Spartan Charge may be applied twice per year Do not apply more than 15 2 fl oz product (0 42 lb ai) per acre 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 / Row Width Feet	X	Broadcast Rate Per Acre	=	Band Rate
Band Width Feet	X	Broadcast Volume Per Acre	=	Band Volume

A minimum 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 5 0 and 9 0

Spartan Charge 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 1 2 year old 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 allows for sufficient time for Spartan Charge to dry on the weed foliage prior to irrigation or rainfall and the application is followed by at least / 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

Spartan Charge provides burndown and is a selective soil applied herbicide for the control of susceptible broadleaf grass and sedge weeds found in Tables 24 and 25 Adequate moisture of / to 1 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 / 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 Spartan Charge with a burndown herbicide and use an appropriate adjuvant when weeds are present at the time of application Refer to the tank mix partner s product label for the proper use rates by weed sizes Use the most restrictive label limitations and precautions of the tank mix product(s)

Residual weed control may be reduced when Spartan Charge 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 Spartan Charge 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

Table 24

Common Name	Scientific Name
Amaranth livid	*Amaranthus lividus*

Amaranth Palmer	*Amaranthus palmen*
Amaranth Powell	*Amaranthus Powell II*
Amaranth spiny	*Amaranthus spinosus*
Amaranth spleen	*Amaranthus dubius*
Anoda spurred	*Anoda cristata*
Barnyardgrass common	*Echinochloa crus galli*
Bedstraw catchweed	*Galium aparine*
Bindweed field	*Convolvulus arvensis*
Bluegrass annual	*Poa annua*
Bromegrass species	*Bromus spp*
Burclover California	*Medicago polymorpha*
Carpetweed	*Mollugo verticillata*
Cheatgrass	*Bromus tectorum*
Cheeseweed species	*Malva spp*
Chickweed common	*Stellaria media*
Clover species	*Trifolium spp*
Copperleaf hophornbeam	*Acalypha ostryeafolia*
Copperleaf Virginia	*Acalypha virginica*
Crabgrass large	*Digitaria sanguinalis*
Crabgrass smooth	*Digitaria ischaemum*
Crabgrass Southern	*Digitaria ciliaris*
Croton tropic	*Croton glandulosus*
Crownbeard golden	*Verbesina encelioides*
Cupgrass wooly	*Enchloa villosa*
Cyperus hedgehog	*Cyperus compressus*
Daisy American	*Eclipta alba*
Devilsclaw	*Proboscidea louisiana*
Dock curly	*Rumex crispus*
Eclipta	*Eclipta prostrata*
Eveningprimrose cutleaf	*Oenothera laciniata*
Fescue Red	*Fetuca rubra*
Fiddleneck species	*Amsinckia spp*
Filaree broadleaf	*Erodium botrys*
Filaree redstem	*Erodium cicutarium*
Filaree whitestem	*Erodium moschatum*
Fleabane hairy	*Conyza bonariensis*
Flixweed	*Descurainia sophia*
Foxtail bristly	*Setan verticillata*
Foxtail giant	*Setaria faben*
Foxtail green	*Setaria viridis*
Foxtail yellow	*Setaria glauca*
Galinsoga hairy	*Galinsoga ciliata*
Goosegrass	*Eleusine indica*
Goosefoot nettleleaf	*Chenopodium murale*
Groundcherry clammy (seedling)	*Physalis heterophylla*
Groundcherry cutleaf	*Physalis angulata*
Groundsel common	*Senecio vulgaris*
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 scoparia*
Ladysthumb	*Polygonum persicaria*
Lambsquarters common	*Chenopodium album*
Lettuce miners	*Montia perfoliata*
Lovegrass species	*Eragrostis spp*
Mallow common	*Malva neglecta wall r*
Mallow little	*Malva parviflora*
Mayweed Chamomile	*Anthemis cotula l*
Milkweed honeyvine	*Ampelamus albidus*
Morningglory entireleaf	*Ipomoea hederacea integnuscula*
Morningglory ivyleaf	*Ipomoea hederacea hederacea*
Morningglory palmleaf	*Ipomoea wrightii*

Morningglory purple	*Ipomoea turbinata*
Morningglory red	*Ipomoea coccinea L*
Morningglory scarlet	*Ipomoea coccinea*
Morningglory smallflower	*Jacquemontia tamnifolia*
Morningglory tall	*Ipomoea 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*
Panicum fall	*Panicum dichotomiflorum*
Pigweed prostrate	*Amaranthus blitoides*
Pigweed redroot	*Amaranthus retroflexus*
Pigweed smooth	*Amaranthus hybridus*
Pigweed Tumble	*Amaranthus albus*
Pineapple weed	*Chamomilla suaveolens*
Plantain blackseed	*Plantago rugelii decne*
Plantain narrow leaved	*Plantago lanceolata*
Poorjoe	*Diodia teres*
Porophyllum	*Porophyllum rederale*
Poinsettia wild	*Euphorbia heterophylla*
Puncturevine	*Tribulus terrestris*
Purslane common	*Portulaca oleracea*
Redmaids	*Calandrinia ciliata*
Redweed	*Melochia corchorifolia*
Radish Wild	*Raphanus raphanistrum*
Rocket London	*Sisymbrium iro*
Sandbur	*Cenchrus spinifer*
Sedge annual	*Carex spp*
Senna coffee	*Cassia occidentalis*
Sheperdspurse	*Capsella bursa pastoris*
Sida prickly	*Sida spinosa*
Sida Southern	*Sida acuta*
Signalgrass broadleaf	*Brachiaria platyphylla*
Smartweed PA (seedling)	*Polygonum pensylvanicum*
Smellmellon	*Cucumis melo*
Sowthistle species	*Sonchus spp*
Srangletop red	*Leptochloa filiformis*
Spurge spotted	*Chamaesyce maculate*
Starbur bristly	*Acanthospermum hispidum*
Stinkgrass	*Eragrostis cilianensis*
Toadflax yellow	*Linaria vulgaris*
Tassleflower red	*Emilio sonchifolia*
Thistle Russian	*Salsola kali*
Waterhemp common	*Amaranthus rudis*
Waterhemp tall	*Amaranthus tuberculatos*
Waterprimrose winged	*Ludwigia decurrens*
Willowleaf panicle leaf	*Epilobium brachycarpum*
Witchgrass	*Panicum capillare*

ANNUAL AND PERENNIALSEDGE CONTROL INCLUDING NUTSEDGE

Spartan Charge applied at 15 2 ounces per acre may provide control or suppression of sedges whether applied preemergence or postemergence Postemergence application to sedges allows Spartan Charge 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 0 25 / v/v when applying postemergence

When applied as directed Spartan Charge will provide control or suppression of the following sedges

Table 25

Common Name	Scientific Name
Kyllinga green	*Kyllinga brevifolia*
Kullinga 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*

Optimum control of purple nutsedge may be obtained using split applications of Spartan Charge Apply 5 – 7 7 ounces per acre followed by a second application to actively growing nutsedge Do not exceed the maximum rate of 15 2 ounces (0 42 lb ai) per season Spartan Charge symptoms on nutsedge will be observed as reduced nutsedge stands necrosis chlorosis and/or stunting Optimum control may not be observed until the second year after the original treatment

REPLANTING IN NEW OR MATURE ORCHARDS AND VINEYARDS
Delay replanting at least 30 days after Spartan Charge applications when replacing trees and vines in established orchards Use untreated soil when replanting trees and vines

Precautions
These Crop Specific Use directions are based upon the interactive effects of Spartan Charge Herbicide and the primary soil and environmental factors which affect its activity on various weed species and tolerance among crops The user is required to observe the instructions and guidance previously presented under Product Application Instructions Spartan Charge 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 Spartan Charge Herbicide Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on Spartan Herbicide 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 Spartan Charge using airblast sprayers or by air Use ground equipment only
- Do not apply more than 15 2 oz product (0 42 lb ai) per application or 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 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 injury warnings or restrictions
- Pre harvest Interval (PHI) 3 days
- If two banded treatments are made in a growing season allow a minimum of 60 days between applications however do not exceed the seasonal maximum use rate

CROP ROTATIONAL INTERVALS

Shown below are the minimum intervals in months from the time of SPARTAN CHARGE application until SPARTAN CHARGE treated soil may be replanted with the crops listed When SPARTAN CHARGE is tank mixed with other herbicide(s) refer to all those labels for re cropping instructions following the intervals that are the most restrictive For crops not listed the interval is 12 months in addition to a successful field bioassay

The field bioassay is a test strip of the intended crop planted across the previously treated field and grown to maturity The test strip should include low spots knolls and variable pH and soil types If crop responses are not observed the crop may be planted the following year

CROP ROTATION INTERVALS

CROP	**INTERVAL** (Months)
Alfalfa	12
Barley	4
Berries (Crop subgroup 13 07)	Anytime
Cabbage (transplant only)	Anytime
Canola Crambe	24
Citrus (Crop Group 10)	Anytime
Corn field	Anytime
Corn pop	Anytime
Corn seed	Anytime
Corn sweet	4
Cotton	12
Dry Shell Peas & Beans	Anytime
Grapes	Anytime
Horseradish	Anytime

Lima Beans (Tennessee only)	Anytime
Mint	Anytime
Peanuts	Anytime
Potatoes	Anytime
Rice	10
Rye	4
Sorghum	10**
Soybeans	Anytime
Sugar Beets	36
Sugarcane	Anytime
Sunflowers	Anytime
Sweet Potatoes	12
Tobacco	Anytime
Tree Nuts (Crop group 14)	Anytime
Triticale	4
Turf	Anytime
Wheat	4

* For all other crops not listed, the rotation interval is a minimum of 12 months.
** 18 month rotation for rates above 10.2 fluid ounces per acre

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