279-3334 4/3/200	8, Page 13-18		
UNITED STATED TO AGE	EFA Reg. Number: Date of Issuance: 279-3334 4-3-08 Term of Issuance:		
U.S. ENVIRONMENTAL PROTECTION AGENCY	With An Expiration Date of June 1, 2010		
Office of Pesticide Programs Registration Division (7505C) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460 NOTICE OF PESTICIDE: <u>X</u> Registration	Name of Pesticide Product: F7120 SC (SPARTAN ADVANCE)		
Reregistration (under FIFRA, as amended)			
Name and Address of Registrant (include ZIP Code): FMC Corporation 1735 Market Street Philadelphia, PA 19103			
Note: Changes in labeling differing in subtance from that accepted in connection with a accepted by the segistration Division prior to use of the label in commerce. In any conthe above SPA registration numbers	this registrationsmist be submitted to and the structure of the submitted to and the submitted to and the submitted to and the submitted to and the submitted to a submitte		
On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect			
health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.			
This product is conditionally registered in accordance with F that you:	FIFRA section 3(c)(7) provided		
 Add the EPA Reg. No. 279-3334, and the EPA Esta product label before shipping. Make the following label changes: 	ablishment Number to your		
a. The flash point value for your product provided in is >220°F. In accordance with 40CFR158.76, a product >220°F is not required to put the Physical-Chemical Ha product label. However, if you still decide to put such be revised to state "Combustible. Do not use or store r	t with this flash point value of zard warning on the proposed a warning on the label, it must near heat or open flame."		
Signature of Approving Official:	Date: 4-3-08		
James Tompkins, Product Manager (25) Herbicide Branch, Registration Division (7505C) EPA Form 8570-6			

- 1 -

b. A one year storage stability study (Gln. 830.6317), and a corrosion characteristics study (Gln. 830.6320) must be submitted. The studies should be submitted in hard copy and electronically.

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c. Under the "PRECAUTIONARY STATEMENTS", add "Wear protective eyewear. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco." after "Causes moderate eye irritation." Under "User Safety Recommendations", change "Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet." to "Wash hands before using the toilet."

d. Revise the "Storage and Disposal" box to conform to Pesticide Registration Notice (PR) 2007-4:Labeling Revisions Required by the Final Rule "Pesticide Management and Disposal; Standards for Pesticide Containers and Containment."

e. The Agency has no intention of enforcing comments under the "Vegetable Disclaimer". Thus, these statements could be construed as false and misleading. Remove the "Vegetable Disclaimer" from this Section 3 label.

f. Under "RATE CONVERSION CHART (16)" add "Total" to "Ib ai" in the second column. Remove the entire first column containing "Product oz/A*" under "SULFENTRAZONE", and add the "*" after "Ib ai" in the second column under "SULFENTRAZONE". Also remove the entire first column under "Glyphosate", and add the "**" after "Ib ai" in the second column under "Glyphosate".

g. Under the "CROP ROTATION INTERVALS*" table, move the paragraph containing "Hybrid Corn Seed Production" to the "Precautions" paragraph under the "CORN" use directions.

h. Change the heading "CORN (Field Corn, Seed Corn, Popcorn" to "FIELD CORN AND SEED FIELD CORN". Popcorn, and sweet corn seed corn are not approved uses for the sulfentrazone technical, and there are no tolerances established for popcorn grain and stover, or sweet corn.

i. Under the "SOYBEANS" use directions, add "Do not harvest soybean forage for livestock feed."

j. Under "Restrictions" for the "FALLOW OR POST HARVEST BURNDOWN (28)" section, add "See the CROP ROTATION INTERVALS Table for crops which can be planted after a fallow (fall or spring) or post harvest application."

k. Under "PEANUTS (29)", relocate the "Preplant Fall Applications" and "Early Preplant and Preemergence" paragraphs before the "Precautions" paragraph.

I. Under "SOYBEANS – REDUCED RATE APPLICATIONS (32)", add "Do not harvest forage or feed forage to livestock." under the "Restrictions" section.

m. Under "SUGARCANE (33) ", change the first sentence in the paragraph under "Aerial Applications" to "SPARTAN ADVANCE may be applied preemergent to newly planted sugarcane by air in a minimum of 5 gallons, etc."

n. Under "CABBAGE (Transplanted Only) (35)", in the first sentence of the paragraph

with the "Early Preplant (Fall Application or Spring Application)" heading, change to "...preceding the growing season to control weeds prior to transplanting cabbage." Change the second sentence under "Transplant Cabbage" to "Make applications broadcast or banded treatment prior to transplanting." Correct the typo in the last sentence in the same paragraph to "SPARTAN ADVANCE may be applied as a banded treatment into the row middles within 72 hours before transplanting." If "after" is not a typo, provide appropriate language to protect transplants during application, such as "Use shielded sprayers. Do not allow spray to contact plant tissue. Etc." Under "Restrictions" add "The preharvest interval is 80 days." 8

o. Under "DRY SHELLED BEANS AND PEAS (36)", add under "Restrictions", "Do not feed livestock treated crop or allow them to graze harvested fields.", and "The preharvest interval is 90 days."

p. Under "LIMA BEANS, SUCCULENT (38)", change "44.8 fluid ounces" under "Restrictions" to "43.0 fluid ounces". Also add the restrictions, "Do not harvest crop for 90 days after the last application.", and "Do not harvest forage or feed forage to livestock."

In the "MAXIMUM ALLOWABLE SPARTAN ADVANCE USE PER ACRE PER 12 MONTH PERIOD (25)" table on page 6, change "44.8" oz. to "43.0" oz. for "Lima Beans (Succulent)".

q. Change "MINT (39)" to "PEPPERMINT AND SPEARMINT (39)". Under "Restrictions" for peppermint and spearmint, add "Do not harvest for 92 days after last application."

3. Submit one copy of your final revised printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of labeling is enclosed for your records. If you have any questions please contact Phil Errico at 703-305-6663/Errico.Philip@epa.gov.

Sincerely,

James Tompkins

Product Manager (25) Herbicide Branch Registration Division (7505P)

Enclosure: Stamped Product Label with EPA Reg. No. 279-3334

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ACCEPTED with COMMENTS In EPA Letter Dated

4/3/2008

F7120 SC (SPARTAN ADVANCE) Fundicide, and Rodenticide Act For Use Only by Individuals/Firms®Certific for the pesticide As Licensed Pesticide Applicators

EPA Reg. No. 279-XXX	EPA Est. XXX
Active Ingredient: (1)	By Wt.
Sulfentrazone*	
Glyphosate IPA**	
Other Ingredients:	
Total:	
*SPARTAN ADVANCE Herbicide contair active ingredient Sulfentrazone.	s 0.56 pounds per US gallon of the

active ingredient Suferinazone. ** SPARTAN ADVANCE contains 4.04 pounds per US gallon of the active ingredient Glyphosate, in the form of isopropylamine salt, (3.00 pounds per gallon of glyphosate acid). Contains Petroleum Distillates

U.S. Patent Pending

KEEP OUT OF REACH OF CHILDREN

CAUTION-AVISO

Si usted no etiende esta etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

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.

THE ACTIVE INGREDIENT SULFENTRAZONE IS MADE IN CHINA. THE ACTIVE INGREDIENT GLYPHOSATE IS MADE IN USA. SPARTAN ADVANCE IS FORMULATED AND PACKAGED IN USA.

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 on page 2 of this label. If the terms and conditions are unacceptable, return the product immediately in the original and unopened container.

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

Physical/Chemical Hazards (8)

Do not use or store near heat or open flame.

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 JF 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.

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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 should 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 permitted by 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 PERMITTED BY 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 permitted by applicable law, buyer assumes the risk of any such use.

To the extent permitted by 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 PERMITTED BY 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.

Vegetable Disclaimer

FMC Corporation intends to offer this product only to those end users and/or growers who have liability and indemnification agreements with FMC Corporation for failure to perform and crop damage from the use of SPARTAN ADVANCE on Cabbage, Chickpea, Dry Field Pea, Potato, Dry Edible beans, Peanuts Horseradish and Limas. If, after purchasing the product, the release of liability and indemnification is unacceptable to the user and/or grower, FMC Corporation requests that the user and/or grower return SPARTAN ADVANCE to the place of purchase at once, unopened.

This product when used on Cabbage, Chick Pea, Dry Field Pea, Potato, Dry edible beans, peanuts, Horseradish and Limas may lead to crop injury, loss, or damage. FMC Corporation recommends that the user and/or grower test product in order to determine its suitability for such intended use. FMC Corporation makes the product available to the user and/or grower solely to the extent the benefit and utility, in sole opinion of the user and/or grower, outweigh the extent of potential injury associated with the use of this product. The decision to use or not to use this herbicide must be made by each individual user and/or grower on the basis of possible crop injury from SPARTAN ADVANCE, the severity of weed infestation, the cost of alternative weed controls and other factors, because of the risk of crop damage all such use is at the user's and/or grower's risk.

7 18

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 Disposal

Metal Containers

Metal containers should be triple rinsed (or equivalent). Then offered for recycling or reconditioning, or punctured and disposed of in a sanitary landfill, or by other procedures approved by state and local authorities. Do not cut or weld metal containers.

Plastic Containers

Plastic containers should be triple rinsed (or equivalent). Then offered to an approved pesticide container recycling program. Or punctured and disposed of in an approved waste disposal facility. Provided on-site incineration is allowed by State and local authorities, containers may be burned. Stay out of smoke.

Returnable/Refillable Sealed Containers

Do not break container seals. Do not empty remaining formulated product. Do not rinse inside of container. Return container intact to point of purchase.

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 can not 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 recommended rates and in accordance with the use directions. Do not use less than recommended 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.

GENERAL INFORMATION (15)

SPARTAN ADVANCE is an herbicide that may be applied before or after weed emergence for control of many broadleaf and grassy weeds. Weeds are easiest to control when they are small. Always use the higher recommended rate of this product, for the appropriate soil texture and organic matter, when weed growth is dense or heavy, or 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.

SPARTAN ADVANCE is a soluble concentrate herbicide with systemic and soil residual activity. SPARTAN ADVANCE is to be mixed with water, liquid fertilizer, or mixtures of water and liquid fertilizer for preemergence weed control in labeled crops. Spartan Advance also contains the herbicide glyphosate which will kill non-tolerant crops if applied after crop emergence. This herbicide is designed to provide both burndown control of emerged weeds and residual control of weeds prior to planting or crop emergence.

The mode of action of SPARTAN ADVANCE herbicide is dual action and involves uptake by weed roots and shoots. Sulfentrazone, one of the active ingredients in SPARTAN ADVANCE, is a potent inhibitor of the enzyme Protoporpyrinogen Oxidase IX (PPO IX) required for the formation of chlorophyll. Glyphosate, the second active ingredient in SPARTAN ADVANCE, inhibits an enzyme found only in plants and microorganisms that is required for amino acid formation. Soil applications of SPARTAN ADVANCE must be made before crop seed germination to prevent injury to the emerging crop seedlings. SPARTAN ADVANCE applied after crop emergence will cause severe injury to the crop. Refer to the specific directions of use for a particular crop/use pattern as set forth below for additional information.

SPARTAN ADVANCE herbicide exhibits excellent crop safety. 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 ADVANCE can contribute to crop response.

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

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 ADVANCE. 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

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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 Containment capacities as described above shall be the pad. 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.

RATE CONVERSION CHART (16)

SPAR ADVA	SPARTAN ADVANCE SULFENTRAZO		RAZONE	GLYPH	OSATE
Product oz/A	lb ai	Product oz/A*	lb ai	Product oz/A**	lb ai
21	0.58	3.0	0.09	21	0.49
26	0.72	3.7	0.11	26	0.61
32	0.89	4.5	0.14	32	0.75

* Based on Spartan 4F formulation

** Based on Glyphosate 3.0 lb ae formulation

SOIL CLASSIFICATION CHART (17)

l	COARSE	MEDIUM	FINE	
ſ	Sand	Sandy clay loam	Silty clay loam	
	Loamy sand	Sandy clay	Silty clay	
	Sandy loam	Loam	Clay loam	
I		Silt loam	Clay	
l		Silt	Ţ.	

CROP ROTATIONAL INTERVALS (18)

Shown below are the minimum intervals in months from the time of SPARTAN ADVANCE application until SPARTAN ADVANCE treated soil may be replanted with the crops listed. When SPARTAN ADVANCE 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
Cabbage (transplant only)	Anytime
Canola, Crambe	24
Chickpeas	Anytime
Corn, field	Anytime
Corn, pop	Anytime
Corn, sweet	18
Cotton	18
Dry Shell Peas & Beans	Anytime
Horseradish	Anvtime

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Lima Beans -	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
Triticale	4
Turf	Anytime
Wheat	4

* 18 month rotation for rates above 57.6 fluid ounces per acre

** For all other crops not listed, the rotation interval is a minimum of 12 months.

Hybrid Corn Seed Production

Corn inbred lines grown for hybrid seed production may be injured in the growing season following an application of SPARTAN ADVANCE. 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 ADVANCE.

REPLANTING INSTRUCTIONS (19)

If the initial planting of labeled crops fails to produce a uniform stand, only labeled crops for SPARTAN ADVANCE or the tank mix partner; which ever is most restrictive, may be replanted. Do not retreat fields with a second application of SPARTAN ADVANCE 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.

APPLICATION INFORMATION (20)

Ground Application

Use a conventional low pressure herbicide boom sprayer equipped with suitable nozzles and screens. Apply uniformly using properly calibrated nozzles and screens and strainers no finer than 50 mesh. Use 10 to 40 gallons of spray solution per acre. Do not exceed 40 psi spray pressure unless required by the spray nozzle manufacturer.

Water or clear liquid fertilizer solutions (28–32% nitrogen only) may be used as the carrier for SPARTAN ADVANCE when applied alone or in tank mixtures with other registered herbicides. A jar test is recommended to determine the compatibility of SPARTAN ADVANCE and the fertilizer solution.

A nonionic surfactant (NIS) or a wetting agent labeled for use with herbicides is required for SPARTAN ADVANCE applications. Add surfactant at 2 quarts per 100 gallons of spray solution. The surfactant must contain at least 70% active ingredient. Read and follow all applicable use directions, precautions and restrictions on the surfactant label.

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 ADVANCE 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 ADVANCE applications must be drained and thoroughly cleaned with water plus ammonia before being used to apply other products. See Spray Clean-out Section 21 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.

SPARTAN ADVANCE herbicide

Aerial Application

SPARTAN ADVANCE 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 ADVANCE 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 potentius, 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 ADVANCE 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).

BAND TREATMENT APPLICATIONS (22)

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

Band Width Inches Row Width Inches	х	Broadcast Rate Per Acre	=	Band Rate
Dand Midth Inchas		Decederat		
Row Width Inches	х	Broadcast Volume Per Acre	=	Band Volume

MIXING AND LOADING INSTRUCTIONS (23)

SPARTAN ADVANCE Applied Alone

Select the proper SPARTAN ADVANCE 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 ADVANCE 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 ADVANCE spray mixture immediately after mixing.

Do not store spray mixture.

Do not prepare spray mixtures in nurse tanks.

SPARTAN ADVANCE Applied in Tank Mix Combination

Select the proper SPARTAN ADVANCE 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. 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 ADVANCE for the acreage being treated by opening the bottle(s) and measuring directly into the spray tank. Allow the product to fully disperse. Next, add the recommended

amount(s) of the additional tank mix product(s) in the following order: first dry formulations (e.g., wettable powders, dry flowables), next liquid suspensions (e.g., flowables) 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 ADVANCE tank mixtures immediately after mixing.

Do not store tank mixtures.

Do not prepare spray mixtures in nurse tanks.

SPARTAN ADVANCE Applied Alone with Liquid Fertilizer

When adding SPARTAN ADVANCE to a liquid fertilizer carrier, SPARTAN ADVANCE should be premixed in clear water.

Fill the spray tank one-half full with fertilizer solution. With agitator operating, add the SPARTAN ADVANCE slurry to the spray tank. Use a minimum of one gallon of water for each container of SPARTAN ADVANCE. Stir until completely dissolved. Then add slurry to the spray tank through a 20-35 mesh screen. Rinse container used for premixing and add rinsate to the spray tank. Complete filling the sprayer tank with fertilizer. Maintain agitation during filling, mixing and application. Use SPARTAN ADVANCE spray mixture immediately after mixing.

Do not store mixture.

Do not prepare spray mixtures in nurse tanks.

Fertilizer Spray Mixtures

Applications of SPARTAN ADVANCE 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.

Adjuvants

A nonionic surfactant (NIS) or a wetting agent labeled for use with herbicides is required for SPARTAN ADVANCE applications. Add surfactant at 2 quarts per 100 gallons of spray solution. The surfactant must contain at least 70% active ingredient. Read and follow all applicable use directions, precautions and restrictions on the surfactant label.

Ammonium Sulfate

Where hard water conditions exist, the addition of 8 to 16 pounds of dry ammonium sulfate (or the equivalent of ammonium sulfate in a liquid formulation or high quality water conditioner) may improve the performance of this product. Thoroughly dissolve the dry ammonium sulfate in the spray tank before adding herbicides or surfactants. After SPARTAN ADVANCE herbicide use, completely rinse the spray system with clean water to reduce corrosion.

Drift Reduction Agents

Drift reduction agents may be used, especially near sensitive vegetation. Drift reduction agents can affect the spray pattern, causing reduced performance if adequate coverage is not obtained. Check your local county or state regulations that may require the use of a drift reduction agent.

SPRAY EQUIPMENT CLEAN-OUT (24)

After spraying SPARTAN ADVANCE 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 ADVANCE 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 ADVANCE USE PER ACRE PER 12 MONTH PERIOD* (25)

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

Сгор	Ounces SPARTAN ADVANCE Per Acre	Pounds Active SPARTAN ADVANCE** Per Acre
Row Crops		
Corn	86.4	3.08
Fallow	57.6	1.15
Peanut	64.8	1.38
Potato	57.6	1.15
Soybeans	86.4	3.08
Sugarcane	86.4	3.08
Sunflowers ·	57.6	1.15
Vegetable Crops		
Cabbage	86.4	3.08
Dry Beans & Peas	57.6	1.15
Horseradish	57.6	1.15
Lima Beans (Succulent)	44.8	0.86
Oil Crops		
Mint	86.4	. 3.08

*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 inseason treatments. The twelve-month period is considered to begin upon the initial SPARTAN ADVANCE application.

** Based on total active sulfentrazone and glyphosate IPA

Weeds Controlled (26)

General Preemergent Weeds Controlled (Refer to individual crop sections for pre-emergent) 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, lvyleaf	Ipomea hederacea hederacea
Morningglory, Palmleaf	Ipomea Wrightii
Morningglory, pitted	Ipomea lacunosa
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
Prickly Sida, Teaweed	Sida spinosa
Smartweed, Pennsylvania	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.

) General Postemergent Weeds Controlled

Common Name	Scientific Name
BROADLEAVES	
Amaranth, livid	Amaranthus lividus
Amaranth, Palmer (non- glyphosate tolerant)*	Amaranthus palmeri
Amaranth, Powell	Amaranthus powellii
Amaranth, spiny	Amaranthus, spinosus
Amaranth, spleen	Amaranthus dubius
Ammania, purple	Ammania coccinea
Anoda, spurred	Anoda cristata
Bassia, fivehook	Bassia hyssopifolia
Beggarweed, Florida	Desmondiom tortuosum
Bittercress	Cardamine hirsuta
Burcucumber	Sicyos angulatus
Buttercup	Ranunculus spp.
Carolina geranium	Geranium carolinianum
Carpetweed .	Mullugo verticillata
Catchweed Bedstraw	Galium aparine
Chervil	Anthriscus cerefolium
Chickweed, Common	Stellaria media
Cocklebur, common	Xanthium strumarium
Copperleaf, Hophornbeam	Acalypha ostryeafolia
Copperleaf, Virginia	Acalypa virginica
Coreopsis, plains	Coreopsis tinctoria
Corn speedwell	Veronica arvensis
Corn, volunteer	Zea maize
Cotton, volunteer	Gossypium hirsutum
Croton, tropic	Croton glandulosis
Cutleaf evening primrose	Oenothera laciniata
Dwarfdandelion	Krigia dandelion
Eclipta	Eclipta prostrata
Falseflax, smallseed	Camelina microcarpa
Fiddleneck	Amsinckia menziesii
Field pennycress	Thlaspi arvense
Fleabane, hairy	Conyza bonariensis
Fleabane, annual	Erigeron annuus
Fleabane, rough	Erigeron strigosus
Flixweed	Descurainia sophia

	Galinsoga ciliata
Golden crownbeard	Verbesina encelioides
Groundcherry, clammy (seedling)	Physalis heterophylla
Groundcherry, cutleaf	Physalis angulata
Groundsel, common	Senecio vulgaris
Hemp sesbania	Sesbania exaltata
Henbit	Lamium amplexicaule
Jimsonweed	Datura stramonium
Knotweed, prostrate	Polygonum aviculare
	Polygonum persicaria
alvohosate resistant)*	Chenopodium album
London rocket	Sisymbrium irio
Mallow, common	Malva neglecta
Mayweed	Anthemis cotula
Morningglory, Entireleaf	Ipomea hederacea integriusc
Morningglory, lyyleaf	Ipomea hederacea hederacea
Morningglory, Palmleaf	Ipomea Wrightii
Morningglory, pitted	Ipomea lacunosa
Morningglory, purple	Ipomea turbinata
Morningglory, red	Ipomea coccinea
Morningglory, scarlet	Ipomea hederifolia
Morningglory, smallflower	Jacquemontia tamnifolia
Morningglory, tall	Ipomea, purpurea
Mustard, black	Brassica nigra
Mustard, blue	Chorispora tenella
Mustard, tansy	Descurainia pinnata
Mustard, tumble	Sisymbrium altissimum
Mustard, wild	Brassica kaber
Nightshade, black	Solanum nigrum
Nightshade, Eastern black	Solanum americanum
Nightshade, hairy	Solanum sarrachoides
Pigweed, redroot	Amaranthus retroflexus
Pigweed, smooth	Amaranthus hybridus
Pursiane, common	Portulaca oleracea
Pusley, Florida	Richardia scabra
alvphosate tolerant)*	Ambrosia artemisiifolia
Ragweed, giant (non-glyphosate tolerant)*	Ambrosia trifida
Red rice	Oryza punctata
Redmaids	Calandrinia caulescens
Redstem Filaree	Erodium cicutarium
	On a settle frame a settle of a
Sheperdspurse	Capsella bursa pastoris
Sheperdspurse Sicklepod	Senna obtusifolia
Sheperdspurse Sicklepod Sida, prickly (Teaweed)	Capseila bursa pastons Senna obtusifolia Sida spinosa
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, spotted	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia maculata
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, spotted Spurry, umbrella	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia maculata Holosteum umbellatum
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, spotted Spurry, umbrella Sunflower, wild, volunteer	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia maculata Holosteum umbellatum Helianthus annuus
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, spotted Spurry, umbrella Sunflower, wild, volunteer Swinecress	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia maculata Holosteum umbellatum Helianthus annuus Coronopus didymus
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, spotted Spurry, umbrella Sunflower, wild, volunteer Swinecress Velvetleaf	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia maculata Holosteum umbellatum Helianthus annuus Coronopus didymus Abutilon theophrasti
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, spotted Spurry, umbrella Sunflower, wild, volunteer Swinecress Velvetleaf Virginia pepperweed	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia maculata Holosteum umbellatum Helianthus annuus Coronopus didymus Abutilon theophrasti Lepidium virginicum
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, spotted Spurry, umbrella Sunflower, wild, volunteer Swinecress Velvetleaf Virginia pepperweed Waterhemp, common (non- glyphosate resistant)*	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia humistrata Euphorbia maculata Holosteum umbellatum Helianthus annuus Coronopus didymus Abutilon theophrasti Lepidium virginicum Amaranthus rudis
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, spotted Spurry, umbrella Sunflower, wild, volunteer Swinecress Velvetleaf Virginia pepperweed Waterhemp, common (non- glyphosate resistant)* Waterhemp, tall (non-glyphosate resistant)*	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia maculata Holosteum umbellatum Helianthus annuus Coronopus didymus Abutilon theophrasti Lepidium virginicum Amaranthus rudis Amaranthus tuberculatos
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, spotted Spurry, umbrella Sunflower, wild, volunteer Swinecress Velvetleaf Virginia pepperweed Waterhemp, common (non- glyphosate resistant)* Waterhemp, tall (non-glyphosate resistant)*	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia maculata Holosteum umbellatum Helianthus annuus Coronopus didymus Abutilon theophrasti Lepidium virginicum Amaranthus rudis Amaranthus tuberculatos Barbarea vulgaris
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, prostrate Spurge, spotted Spurry, umbrella Sunflower, wild, volunteer Swinecress Velvetleaf Virginia pepperweed Waterhemp, common (non- glyphosate resistant)* Waterhemp, tall (non-glyphosate resistant)* Yellow rocket GRASSES	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia maculata Holosteum umbellatum Helianthus annuus Coronopus didymus Abutilon theophrasti Lepidium virginicum Amaranthus rudis Amaranthus tuberculatos Barbarea vulgaris
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, spotted Spurry, umbrella Sunflower, wild, volunteer Swinecress Velvetleaf Virginia pepperweed Waterhemp, common (non- glyphosate resistant)* Waterhemp, tall (non-glyphosate resistant)* Yellow rocket GRASSES Barley	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia maculata Holosteum umbellatum Helianthus annuus Coronopus didymus Abutilon theophrasti Lepidium virginicum Amaranthus rudis Amaranthus tuberculatos Barbarea vulgaris Hordeum vulgare
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, prostrate Spurge, spotted Spurry, umbrella Sunflower, wild, volunteer Swinecress Velvetleaf Virginia pepperweed Waterhemp, common (non- glyphosate resistant)* Waterhemp, tall (non-glyphosate resistant)* Yellow rocket GRASSES Barley Barnyardgrass	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia maculata Holosteum umbellatum Helianthus annuus Coronopus didymus Abutilon theophrasti Lepidium virginicum Amaranthus rudis Amaranthus rudis Barbarea vulgaris Hordeum vulgare Echinochloa crus-galli
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, spotted Spurry, umbrella Sunflower, wild, volunteer Swinecress Velvetleaf Virginia pepperweed Waterhemp, common (non- glyphosate resistant)* Waterhemp, tall (non-glyphosate resistant)* Yellow rocket GRASSES Barley Barnyardgrass Cheat	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia maculata Holosteum umbellatum Helianthus annuus Coronopus didymus Abutilon theophrasti Lepidium virginicum Amaranthus rudis Amaranthus rudis Barbarea vulgaris Hordeum vulgare Echinochloa crus-galli Bromus secalinus
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, prostrate Spurge, spotted Spurry, umbrella Sunflower, wild, volunteer Swinecress Velvetleaf Virginia pepperweed Waterhemp, common (non- glyphosate resistant)* Waterhemp, tall (non-glyphosate resistant)* Yellow rocket GRASSES Barley Barnyardgrass Cheat Crabgrass, large	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia humistrata Euphorbia maculata Holosteum umbellatum Helianthus annuus Coronopus didymus Abutilon theophrasti Lepidium virginicum Amaranthus rudis Amaranthus rudis Barbarea vulgaris Hordeum vulgare Echinochloa crus-galli Bromus secalinus Digitaria sanguinalis
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, prostrate Spurge, spotted Spurry, umbrella Sunflower, wild, volunteer Swinecress Velvetleaf Virginia pepperweed Waterhemp, common (non- glyphosate resistant)* Waterhemp, tall (non-glyphosate resistant)* Yellow rocket GRASSES Barley Barnyardgrass Cheat Crabgrass, large Crabgrass, smooth	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia humistrata Euphorbia maculata Holosteum umbellatum Helianthus annuus Coronopus didymus Abutilon theophrasti Lepidium virginicum Amaranthus rudis Amaranthus rudis Barbarea vulgaris Hordeum vulgare Echinochloa crus-galli Bromus secalinus Digitaria sanguinalis Digitaria ischaemum
Sheperdspurse Sicklepod Sida, prickly (Teaweed) Smartweed, PA Sowthistle, annual Spanishneedles Speedwell, purslane Spurge, prostrate Spurge, prostrate Spurge, spotted Spurry, umbrella Sunflower, wild, volunteer Swinecress Velvetleaf Virginia pepperweed Waterhemp, common (non- glyphosate resistant)* Waterhemp, tall (non-glyphosate resistant)* Yellow rocket GRASSES Barley Barnyardgrass Cheat Crabgrass, large Crabgrass, Southern	Capsella bursa pastoris Senna obtusifolia Sida spinosa Polygonum pensylvanicum Sonchus asper Bidens bipinnata Veronica peregrina Euphorbia humistrata Euphorbia humistrata Euphorbia maculata Holosteum umbellatum Helianthus annuus Coronopus didymus Abutilon theophrasti Lepidium virginicum Amaranthus rudis Amaranthus rudis Amaranthus tuberculatos Barbarea vulgaris Hordeum vulgare Echinochloa crus-galli Bromus secalinus Digitaria sanguinalis Digitaria ciliaris
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SPARTAN ADVANCE herbicide

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Foxtail, yellow	Setaria lutescens
Goatgrass, jointed	Aegilops cylindrica
Goosegrass	Eleusine indica
Grain sorghum (milo)	Sorghum bicolor
Itchgrass	Rottboellia cochinchinensis
Johnsongrass, seedling	Sorghum halapense
Junglerice	Echinochloa colona
Oats	Avena sativa
Rye	Secale cereale
Ryegrass (non-glyphosate resistant)*	Lolium multiflorum
Sandbur, field	Cenchrus spinifex
Sandbur, longspine	Cenchrus longispinus
Shattercane	Sorghum bicolor
Signalgrass, broadleaf	Brachiaria platyphylla
Sprangletop	Leptochloa fusca
Stinkgrass	Eragrostis cilianensis
Texas panicum	Panicum texanum
Wheat, volunteer	Triticum aestivum
Wild oats	Avena fatua
Wild proso millet	Panicum miliaceum
Witchgrass	Panicum capillare

Note: Repeated use of the same herbicide or herbicide class can lead to increased levels of weed tolerance or resistance to those herbicides. Some weeds in the list above may exhibit reduced levels of control due to repeated applications of glyphosate in the past. See resistance management statement on page 3 for further information.

CORN (Field Corn, Seed Corn, Popcorn) (27)

Table 1

SPARTAN ADVANCE Use Rate Table (Corn) Fall, Spring Early Preplant and Preemergence Applications

	Broadcast Rate	Fluid Ounces SPARTAN ADVANCE per acre*		
	% Organic Matter	Soil Texture		
		Coarse	Medium	Fine
	<1.5	21.0 - 32:0	21.0 - 32.0	26.0 - 35.0
	1.5-3.0	21.0 - 32.0	26.0 - 43.0	32.0 - 46.0
	>3	26.0 - 43.0	32.0 - 46.0	43.0 - 57.0

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.

When use rates of Spartan Advance are less than 32 oz, additional glyphosate will be required for effective control of emerged weeds.

Preplant Fall Applications

SPARTAN ADVANCE may be applied in the fall as a preplant treatment prior to corn planting the following spring. SPARTAN ADVANCE can be used alone or in a tank mixture with other herbicides to control susceptible broadleaves, sedges and grasses in Apply SPARTAN ADVANCE in conventional tillage or corn. conservation tillage (reduced tillage or no-tillage) cropping systems using rates recommended in Table 1. SPARTAN ADVANCE 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 operation can destroy the herbicide barrier allowing weed escapes to occur. Do not apply to frozen soils or existing snow cover to prevent SPARTAN ADVANCE runoff from rain or snowmelt that may occur following application. SPARTAN ADVANCE may be tank mixed with other burndown herbicides to control emerged weeds in the fall or residual soil herbicides that are labeled for fall use on corn. Select the correct SPARTAN ADVANCE use rate for corn from the Table 1 for your soil type and organic matter. Due to the extended period of time between the fall application and corn planting, the use rate of SPARTAN ADVANCE should be the mid to high rate within the rate range for the) appropriate soil type and organic matter.

Early Preplant and Preemergence (Spring Applications)

SPARTAN ADVANCE may be applied preplant on the soil surface in the spring to control weeds in conventional and conservation tillage systems. SPARTAN ADVANCE can be applied prior to planting until 3

days after planting as a preemergence broadcast or banded soil application if corn seedlings have not broken the soil surface and if the seed furrow is completely closed. For preemergence applications 14-21 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 1. To improve weed control spectrum, SPARTAN ADVANCE can be tank mixed with AimTM. Rage D-TechTM, or other herbicides labeled for use in corn. To control insect pests such as cutworm or armyworm that may be present, SPARTAN ADVANCE may be tank mixed with insecticides including Mustang MaxTM or BrigadeTM. When mixed with insecticides including Mustang Max[™] or Brigade planting into soil treated preplant with SPARTAN ADVANCE, minimize soil disturbance to maintain the herbicide barrier on the soil surface to achieve maximum weed control. Observe all precautions, instructions, and rotational cropping guidelines of each product's label when tank mixing, including all references to potential carryover and crop injury warnings or restrictions.

Precautions

These Crop Specific Use directions are based upon the interactive effects of SPARTAN ADVANCE 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 ADVANCE 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 ADVANCE. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on SPARTAN ADVANCE under specific local conditions.

Restrictions

Do not apply more than 86.4 fluid ounces per twelve-month period. The twelve-month period is considered to begin upon the initial SPARTAN ADVANCE 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 ADVANCE runoff from rain or snowmelt that may occur following application.

FALLOW OR POST HARVEST BURNDOWN (28)

SPARTAN ADVANCE may be applied in the fall following crop harvest or in existing fallow fields using rates recommended in table 2. Follow crop rotational restrictions when replanting following Spartan Advance applications.

Table 2			
SPAR1 (Fa Fi	TAN ADVANC Now or Post Har all and Spring Fal	CE Use Rate Ta rvest Burndown) low Applications	able
Broadcast Rate Fluid Ounces SPARTAN ADVANCE per acre*			
	Soil Texture		
% Organic Matter	Coarse	Medium	Fine
<1.5	21.0 - 26.0	21.0 - 32.0	26.0 - 35.0
1.5-3.0	26.0 - 35.0	[·] 26.0 – 43.0	32.0 - 46.0
>3	32.0 - 43.0	32.0 - 57.0	35.0 - 57.0
Refer to the previo	ous information o	n 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.

When use rates of Spartan Advance are less than 32 oz, additional glyphosate will be required for effective control of emerged weeds.

Fall Application (MN, ND, SD, MT, CO, NE, WY, ID, WA, OR, WI, MI) SPARTAN ADVANCE may be applied in the fall following crop harvest or in existing fallow fields to control or suppress weeds the following

SPARTAN ADVANCE herbicide

season. The Rotational Crop Guidelines in the Crop Rotational Guideline Table must be followed if crops are planted the next season. SPARTAN ADVANCE 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 ADVANCE runoff from rain or snow that may occur following application. SPARTAN ADVANCE may be tank mixed with herbicides to control emerged weeds. Sequential applications may be needed depending on weed Use full, recommended rates of burndown herbicides in size. combination with SPARTAN ADVANCE, or sequential applications as needed. Higher aerial spray volumes are required when there is a dense weed population or canopy.

SPARTAN ADVANCE 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.

Spring Preemerge Application

SPARTAN ADVANCE may be applied as a fallow treatment early in the spring. Follow the same use rate recommendations and application guidelines listed under the Fall Application section above.

When applied according to directions, SPARTAN ADVANCE will provide control of

provide control on	
Kochia (ALS and Triazine	Pigweed, redroot
Resistant)	
Lambsquarters, common	Pigweed, smooth
Morningglory, ivyleaf	Thistle, Russian
Morningglory, tall	Waterhemp, common
Nightshade, Eastern Black	Waterhemp, tall

Precautions

These Crop Specific Use directions are based upon the interactive effects of SPARTAN ADVANCE 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 ADVANCE 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 ADVANCE. Consult university or extension weed management specialists for additional information on SPARTAN ADVANCE under specific local conditions.

Restrictions

Do not apply more than 57.6 fluid ounces per twelve-month period. The twelve-month period is considered to begin upon the initial SPARTAN ADVANCE 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 ADVANCE runoff from rain or snowmelt that may occur following application.

PEANUTS (29)

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

Apply SPARTAN ADVANCE alone or in combination with other registered herbicides for the control of key grass and broadleaf weeds in peanut production. Refer to the information below for specific use directions. Spartan Herbicide is registered for use on peanuts only in the following states: AL, GA, MS, NC, SC and VA. Refer to table 3 for recommended use rates.

Table 3

When applied as directed at 34 ounces per acre, SPARTAN ADVANCE Herbicide will provide control of the following weed species¹:

¹Specified weeds are controlled in coarse (sand and loamy sand) soils. Medium and fine soils (sandy loam, clay loam, clay) or soils with organic matter greater than 1.0% should use the next higher rate shown below (45 ounces).

When applied as directed at 45 ounces per acre, SPARTAN ADVANCE Herbicide will provide control of the following weed species²:

All the weeds controlled at 34 dry ounces plus:		
Amaranthus, Palmer	Morningglory, smallflower	
Crabgrass, large	Poinsettia, wild	
Crabgrass, Southern	Redweed	
Eclipta	Senna, coffee	
Goosegrass	Signalgrass, broadleaf	
Morningglory, pitted	Smartweed, PA (seedling)	

²Specified weeds are controlled in coarse (sand and loamy sand) soils. Medium and fine soils (sandy loam, clay loam, clay) or soils with organic matter greater than 1.0% should use the next higher rate shown below (57 ounces)

When applied as directed at 57 ounces per acre, Spartan ADVANCE Herbicide will provide control of the following weed species³:

All the weeds controlled at 45 dry ounces plus:		
Anoda, spurred	Purslane, common	
Cocklebur, common	Sida, prickly	
Nutsedge, yellow	Starbur, prickly	
Nutsedge, purple		

³Specified weeds are controlled in coarse (sand and loamy sand) soils. Medium and fine soils (sandy loam, clay loam, clay) or soils with organic matter greater than 1.0% should use application rates between 57 and 64.8 ounces per acre. Do not exceed 64.8 ounces per acre.

In soils with pH greater than 7, use the next lower Spartan Herbicide application rate from table 3 above. Irrigation with alkaline (pH 8 to 9) water can result in adverse crop response. The extent of crop response is dependent on SPARTAN ADVANCE application rate, soil type (including %OM and pH), timing (after SPARTAN ADVANCE application relative to crop emergence), amount and pH of irrigation water. Do not irrigate with water greater than pH 9.

Precautions

These Crop Specific Use directions are based upon the interactive effects of SPARTAN ADVANCE 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, SPARTAN ADVANCE 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 ADVANCE. Consult university or extension weed management specialists for additional information on SPARTAN ADVANCE under specific local conditions.

Restrictions

Do not apply more than 64.8 ounces of Spartan ADVANCE per acre per twelve-month period. The twelve-month period is considered to begin upon the initial Spartan application.

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

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

Do not irrigate with water having a pH higher than 9.

Do not apply at cracking time.

SPARTAN ADVANCE herbicide

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Preplant Fall Applications

SPARTAN ADVANCE may be applied in the fall as a preplant treatment prior to peanut planting the following spring. SPARTAN ADVANCE can be used alone or in a tank mixture with other herbicides to control susceptible broadleaves, sedges and grasses in soybean Apply SPARTAN ADVANCE in conventional tillage or conservation tillage (reduced tillage or no-tillage) cropping systems using rates recommended in Table 3. SPARTAN ADVANCE 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 operation can destroy the herbicide barrier allowing weed escapes to occur. Do not apply to frozen soils or existing snow cover to prevent SPARTAN ADVANCE runoff from rain or snowmelt that may occur following application. SPARTAN ADVANCE may be tank mixed with other burndown herbicides to control emerged weeds in the fall or residual soil herbicides that are labeled for fall use on peanut. Due to the extended period of time between the fall application and peanut planting, the use rate of SPARTAN ADVANCE should be the mid to high rate within the rate range for the appropriate soil type and organic matter.

Early Preplant and Preemergence

SPARTAN ADVANCE herbicide may be applied to the soil surface at planting, or within 12 hours after planting. See table 3 for recommended use rates. Do not use SPARTAN ADVANCE Herbicide for "at-crack" type applications or apply to exposed peanut tissue. Such use can result in significant adverse crop response. Under conditions of exceptionally high weed populations or when weeds not controlled by SPARTAN ADVANCE are anticipated, the use of suitable postemergent peanut herbicides is recommended.

POTATOES (30)

Table 4

SPARTAN A	DVANCE Us Preemergence	e Rate Table (I Application	Potatoes)	
Broadcast Rate Fluid Ounces SPARTAN ADVANCE per acre*				
	Soil Texture			
% Organic Matter	Coarse	Medium	Fine	
<1.5	14.0 - 21.0	14.0 - 21.0	18.0 - 25.0	
1.5 – 3.0	14.0 - 21.0	18.0 – 28.0	21.0 - 28.0	
>3.0	21.0 - 28.0	25.0 - 32.0	28.0 - 38.0	

*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.

* When use rates of Spartan Advance are less than 32 oz, additional glyphosate will be required for effective control of emerged weeds.

Preemergence Applications

Apply Spartan Herbicide by aerial application as a preemergence treatment following planting and after dragoff, but prior to potato emergence. Optimum performance can be achieved if SPARTAN ADVANCE 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. Do not apply SPARTAN ADVANCE if the potatoes have emerged from the soil as undesirable crop response may occur. SPARTAN ADVANCE may be tank mixed with other soil-applied herbicides labeled for use in potatoes to improve weed management and increase weed control spectrum.

Weeds Controlled

When applied according to directions, SPARTAN ADVANCE 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

SPARTAN ADVANCE herbicide

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

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These Crop Specific Use directions are based upon the interactive effects of SPARTAN ADVANCE 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 ADVANCE 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 ADVANCE. Consult university or extension weed management specialists for additional information on SPARTAN ADVANCE under specific local conditions.

Restrictions

Precautions

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

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

Do not apply more than 57.6 ounces per acre per twelve-month period. The twelve-month period is considered to begin upon the initial Spartan application.

SOYBEANS, Conventional and GMO (31)

Table 5

SPARTAN ADVANCE Use Rate Table (Soybeans) Fall, Spring Early Preplant and Preemergence Applications				
Broadcast Rate Fluid Ounces SPARTAN ADVANCE per acre*				
	Soil Texture			
% Organic Matter	Coarse	Medium	Fine	
<1.5	32.0 - 43.0	43.0 - 57.0	57.0	
1.5-3	43.0 - 57.0	57.0 - 70.0	70.0	
>3	57.0 - 70.0	70.0 - 85.0	85.0	
Refer to the previo	ous information o	n soil types under	the COARSE,	

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

* When use rates of Spartan Advance are less than 32 oz, additional glyphosate will be required for effective control of emerged weeds.

Apply SPARTAN ADVANCE in conventional tillage, conservation tillage, reduced tillage or no-tillage cropping systems using rates recommended in the SPARTAN ADVANCE Use Rate Table 5.

Preplant Fall Applications

SPARTAN ADVANCE may be applied in the fall as a preplant treatment prior to soybean planting the following spring using rates recommended in Table 5. SPARTAN ADVANCE can be used alone or in a tank mixture with other herbicides to control susceptible broadleaves, sedges and grasses in soybean. SPARTAN ADVANCE 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 operation can destroy the herbicide barrier allowing weed escapes to occur. Do not apply to frozen soils or existing snow cover to prevent SPARTAN ADVANCE runoff from rain or snowmelt that may occur following application. SPARTAN ADVANCE may be tank mixed with other burndown herbicides to control emerged weeds in the fall or residual soil herbicides that are labeled for fall use on soybean. Due to the extended period of time between the fall application and soybean planting, the use rate of SPARTAN ADVANCE should be the mid to high rate within the rate range for the appropriate soil type and organic matter.

Preplant & Preemergence Applications

SPARTAN ADVANCE can be applied prior to planting or up to 3 days after planting as a preemergent soil application if seedlings have not broken the soil surface and if the seed furrow is completely closed. When applications are delayed greater than 3 days after planting, injury may occur if seeds are germinating. SPARTAN ADVANCE applied near or after crop emergence may cause severe injury to the crop. Refer to table 5 for recommended use rates. To improve weed control spectrum, SPARTAN ADVANCE can be tank mixed with Aim^{TM.} Rage D-Tech[™], or other herbicides labeled for use in soybean. Always follow the most restrictive label when tank mixing.

Reduced Rates for Roundup Ready Soybeans

SPARTAN ADVANCE may be used at reduced rates (table 6) in conjunction with planned follow-up weed control applications with glyphosate based herbicide products labeled for use on Roundup Ready soybean varieties. For preemergent weed control in reduced rate programs additional glyphosate may be needed to provide more consistent burndown of existing weeds, especially if rates below 32 oz of Spartan Advance are used. Follow all SPARTAN ADVANCE application directions.

Apply before planting, at planting time or prior to seed germination. Do not apply later than 3 days after planting or if seeds are germinating. Properly closed seed furrows are required when applying at planting time or before seed germination. Recommended postemergence treatments may include any product or combination of products labeled for use.

SOYBEANS - REDUCED RATE APPLICATIONS (32)

Table 6

SPARTAN ADVANCE Use Rate Table for Reduced Rates

Fall, Preplant, And Preemergence Applications (Reduced rates for the Suppression of Weeds Listed to Reduce Early Season Weed Competition in Glyphosate Tolerant Soybean Systems.)

Broadcast Rate	Fluid ounces SPARTAN ADVANCE per acre*			
% Organic Matter*	Soil Texture			
	Coarse*	Medium	Fine	
1.0 - 2.0	23.0	23.0-30.0	30.0-36.0	
2.0 - 4.0	23.0-30.0	30.0-36.0	36.0	

23.0-30.0 30.0-36.0 Refer to the following chart for information on soil type 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.

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

* When use rates of Spartan Advance are less than 32 oz, additional glyphosate will be required for effective control of emerged weeds.

Precautions

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

SPARTAN ADVANCE is especially effective against a wide range of economic broadleaf and grass weeds. The same processes that SPARTAN ADVANCE 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. SPARTAN ADVANCE herbicide

Restrictions

Do not apply more than 86.4 fluid ounces per acre of SPARTAN ADVANCE per twelve-month period. The twelve-month period is considered to begin upon the initial SPARTAN ADVANCE application.

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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 ADVANCE runoff from rain or snowmelt that may occur following application. Do not apply after crop seed germination.

SUGARCANE (33)

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Broadcast Rate	Fluid Ounce	Fluid Ounces SPARTAN ADVANCE per acre		
		Soil Texture		
 % Organic Matter 	Coarse	Medium	Fine	
<1.5	32.0 - 43.0	43.0 - 57.0	57.0	
1.5-3	43.0 - 57.0	57.0 - 70.0	70.0	
>3	57.0 - 70.0	70.0 - 85.0	85.0	
Refer to the previo MEDIUM, and FIN Use higher rates for greater than 7.0 with	ous information E categories or soils of pH le	on soil types und ess than 7.0 and l	der the COARSE, owest rate for pH	

Apply SPARTAN ADVANCE as a broadcast or banded preemerge soil applied treatment for the control of broadleaf weeds, grasses and sedges in sugarcane. Refer to the SPARTAN ADVANCE Product Use Rate Table 7 for specific use information.

Planting Time Applications

Apply SPARTAN ADVANCE preemergent to newly planted 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 ADVANCE may be applied with other herbicides registered for use in sugarcane.

Aerial Applications

SPARTAN ADVANCE may be applied by air in a minimum of 5 gallons of finished spray per acre. SPARTAN ADVANCE may be applied with other herbicides or insecticides registered for aerial application in sugarcane.

Precautions

These Crop Specific Use directions are based upon the interactive effects of SPARTAN ADVANCE 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 ADVANCE 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 ADVANCE. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on SPARTAN ADVANCE under specific local conditions.

Restrictions

Do not apply more than 86.4 fluid ounces per acre of SPARTAN ADVANCE per twelve-month period. The twelve-month period is considered to begin upon the initial SPARTAN ADVANCE application. Do not use on soils classified as sand, which have less than 1% organic matter.

Do not allow spray to contact crop leaves.

Weeds Controlled

When applied according to directions, SPARTAN ADVANCE will provide control of:

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

See section (23) for POST-emergent weeds controlled

When applied according to directions SPARTAN ADVANCED will provide pre-emergent control of

SUNFLOWERS (34) Table 8

SPARTAN ADVANCE Use Rate Table (Sunflowers)

Fall, Early Spring Preplant and Preemergence Applications

Broadcast Rate	Fluid Ounces SPARTAN ADVANCE per acre* Soil Texture		
% Organic Matter	Coarse	Medium	Fine
<1.5	21.0 - 26.0	21.0 - 32.0	26.0 - 35.0
1.5-3.0	21.0 - 32.0	26.0 - 43.0	32.0 - 46.0
>3	26.0 - 43.0	32.0 - 46.0	43.0 - 57.0
Refer to the previo	ous 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.

* When use rates of Spartan Advance are less than 32 oz, additional glyphosate will be required for effective control of emerged weeds.

Fall Applications (For use only in ND, SD, MT, MN, WY, CO, NE, KS)

SPARTAN ADVANCE may be applied in the fall as a preplant treatment to control or suppress weeds prior to planting sunflowers the following spring. SPARTAN ADVANCE should be applied to the stubble or soil surface and allow moisture from rainfall or snow to move the product into the soil. Do not mechanically incorporate in the fall or spring as this can destroy the herbicide barrier and allowing weed escapes to occur. Do not apply to frozen soils or to existing snow cover to prevent SPARTAN ADVANCE runoff from rain or snow melt that may occur following application. SPARTAN ADVANCE may be tank mixed with other residual soil herbicides that are labeled for fall use on sunflowers. Select the appropriate rate from Table 7 above within the correct soil type and organic matter range. When applying SPARTAN ADVANCE in the fall, use a mid to high rate within the rate range for the appropriate soil type and organic matter.

Early Preplant and Preemergence (Spring Applications)

SPARTAN ADVANCE may be applied preplant on the soil surface in the spring to control weeds in sunflowers. SPARTAN ADVANCE can be applied early preplant prior to planting up to 3 days after planting as a preemergent soil application if seedlings have not broken the soil surface and if the seed furrow is completely closed. For preemergent applications greater than 3 weeks prior to planting, use the high rate within the appropriate rate range for the soil and organic matter type listed in the use rate chart above (Table 8). To improve weed control spectrum, SPARTAN ADVANCE can be tank mixed with Aim™ Rage[™], or other herbicides labeled for use in sunflower. If adequate moisture (1/2" to 1" of rainfall or irrigation) is not received within 7 to 10 days, erratic preemergent weed control may result. Erratic preemergent weed control may also occur if dry conditions persist throughout the growing season. Additional moisture is needed throughout the growing season to maintain herbicide activity and prevent weed escapes.

Precautions

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

Some adverse crop response may occur on coarse textured soils with low organic matter (less than 1.5%) and pH of 7.8 or higher, or on highly eroded soils, or in areas of calcareous outcroppings. SPARTAN ADVANCE herbicide SPARTAN ADVANC_ use rates should be reduced or SPARTAN ADVANCE 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.

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These Crop Specific Use directions are based upon the interactive effects of SPARTAN ADVANCE 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 ADVANCE 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 ADVANCE. Consult university or extension weed management specialists for additional information on SPARTAN ADVANCE under specific local conditions.

Restrictions

Do not apply more than 57.6 fluid ounces per acre of SPARTAN ADVANCE per twelve-month period. The twelve-month period is considered to begin upon the initial SPARTAN ADVANCE application.

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

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

Weeds Controlled

When applied according to directions, SPARTAN ADVANCE will provide control of:

Amaranth, Palmer	Pigweed, red root
Kochia (ALS and Triazine Resistant)	Pigweed, smooth
Lambsquarters, common	Thistle, Russian
Nightshade, Eastern black	Waterhemp, common
Nightshade, black	Waterhemp, tall

See section (23) for POST-emergent weeds controlled

CABBAGE (Transplanted Only) (35) Table 9

SPARTAN A	DVANCE Us	e Rate Table	(Cabbage)
Fall or Spring I	Early Preplant ar	nd Pretransplant A	pplications
Broadcast Rate	Fluid Ounces		NCE per acre*
		Soil Texture	
% Organic Matter	Coarse	Medium	Fine
<1.5%	16.0 - 21.0	21.0 - 32.0	21.0 - 43.0
1.5-3.0 %	21.0 - 43.0	43.0 - 64.0	43.0 - 64.0
>3.0 %	43.0 - 64.0	43.0 - 85.0	43.0 - 85.0
Refer to the previo MEDIUM, and FINE	us information of categories.	n soil types unde	r the COARSE,

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

* When use rates of Spartan Advance are less than 32 oz, additional glyphosate will be required for effective control of emerged weeds.

Early Preplant (Fall Application or Spring Application)

SPARTAN ADVANCE 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 transplanting of cabbage. See rate table 9 for recommended application rates. SPARTAN ADVANCE may be applied in the spring from 60 days prior to planting up to planting time. SPARTAN ADVANCE 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 cudur. Do not apply to frozen soils to prevent SPARTAN ADVANCE runoff from rain or snow that may occur following application. SPARTAN ADVANCE may be tank mixed with other burndown herbicides to control emerged weeds in the fall or spring or with residual soil herbicides that are labeled for fall use on cabbage. Use the full, recommended rates of burndown herbicides in combination with SPARTAN ADVANCE, 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

SPARTAN ADVANCE may be applied Pretransplant as a broadcast or banded treatment to transplanted cabbage only. Applications should be made broadcast or banded treatment prior to transplanting. SPARTAN ADVANCE may be applied as a banded treatment into the row middles within 72 hours after transplanting.

Precautions

These Crop Specific Use directions are based upon the interactive effects of SPARTAN ADVANCE 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 ADVANCE 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 ADVANCE. Consult university or extension weed management specialists for additional information on SPARTAN ADVANCE under specific local varieties or cultivars and any other pertinent information on SPARTAN ADVANCE under specific local conditions.

Restrictions

Do not apply more than 86.4 fluid ounces per acre of SPARTAN ADVANCE per application or per twelve-month period. The twelvemonth period is considered to begin upon the initial SPARTAN ADVANCE application.

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

DRY SHELLED BEANS AND PEAS (36)

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 field pea) and pigeon pea.

Table 10

SPARTAN ADVANCE Use Rate Table (Dry Shelled Beans Peas)

Fall or Spring	Early Preplant and Preemergence Applications		
Broadcast Rate	Fluid Ounces	SPARTAN ADVA	NCE per acre*
		Soil Texture	
% Organic Matter	Coarse	Medium	Fine
<1.5%	16.0 - 21.0	21.0 - 32.0	21.0 - 32.0
1.5-3.0 %	21.0 - 32.0	26.0 - 43.0	32.0 - 43.0
>3.0 %	26.0 - 43.0	32.0 - 46.0	35.0 - 57.0

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.

* When use rates of Spartan Advance are less than 32 oz, additional glyphosate will be required for effective control of emerged weeds.

Early Preplant and Fall Applications (For use only in ND, SD, MT, MN, WY, CO, NE, KS, WI, MI, OR, ID, WA, OR, MT)

SPARTAN ADVANCE may be applied in the fall as a preplant treatment to control or suppress weeds prior to planting the following spring. SPARTAN ADVANCE should be applied to the stubble or soil SPARTAN ADVANCE herbicide surface and allow n divergence 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 ADVANCE runoff from rain or snow melt that may occur following application. SPARTAN ADVANCE may be tank mixed with other residual soil herbicides that are labeled for fall use on dry bean and dry peas. Select the appropriate rate from Table 10 above within the correct soil type and organic matter range. When applying SPARTAN ADVANCE in the fall, use a mid to high rate within the rate range for the appropriate soil type and organic matter.

Early Preplant and Preemergence (Spring Applications)

SPARTAN ADVANCE may be applied preplant on the soil surface in the spring to control weeds in dry bean and dry peas. SPARTAN ADVANCE can be applied early preplant prior to planting up to 3 days after planting as a preemerge soil application if seedlings have not broken the soil surface and if the seed furrow is completely closed. For preemerge applications greater than 3 weeks prior to planting, use the high rate within the appropriate rate range for the soil and organic matter type listed in the use rate chart above Table 10. SPARTAN ADVANCE can be tank mixed with other preemerge herbicides labeled for use on dry bean and dry peas. If adequate moisture (1/2" to 1" of rainfall or irrigation) is not received within 7 to 10 days, erratic preemergent weed control may result. Erratic preemergent weed control may also occur if dry conditions persist throughout the growing season. Additional moisture is needed throughout the growing season to maintain herbicide activity and prevent weed escapes.

Precautions

Read Vegetable disclaimer before using SPARTAN ADVANCED in dry peas and beans. When applying SPARTAN ADVANCE to coarse textured soils, it is recommended that growers allow a minimum of 7-14 days from application to planting. Best results are achieved with SPARTAN ADVANCE when applications are made early preplant and greater than 14 days before planting.

Some adverse crop response may occur on coarse textured soils with low organic matter (less than 1.5%) and pH of 7.8 or higher, or on highly eroded soils, or in areas of calcareous outcroppings. SPARTAN ADVANCE use rates should be reduced in these 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 ADVANCE 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 ADVANCE 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 ADVANCE. Consult university or extension weed management specialists for additional information on SPARTAN ADVANCE under specific local conditions.

Restrictions

Do not apply more than 57.6 fluid ounces per acre per twelve-month period. The twelve-month period is considered to begin upon the initial SPARTAN ADVANCE application.

Do not apply after crop emerges, or if the seedling is close to the soil surface.

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

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

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Weeds Controlled

When applied according to directions, SPARTAN ADVANCE will provide control of:

Kochia (ALS and Triazine Resistant)	Thistle, Russian
Lambsquarters, common	Pigweed, smooth
Nightshade, Eastern black	Waterhemp, common
Nightshade, black	. Waterhemp, tall
Pigweed, red root	

See section (23) for POST-emergent weeds controlled

HORSERADISH (37)

Table 11

SPARTAN ADVANCE Use Rate Table (Horseradish)

Fall or Spring Early Preplant and Preemergence Applications

Broadcast Rate	Fluid Ounces	Fluid Ounces SPARTAN ADVANCE per acre*		
		Soil Texture		
% Organic Matter	Coarse	Medium	Fine	
<1.5%	16.0 - 32.0	21.0 - 32.0	21.0 - 32.0	
1.5-3.0 %	32.0 - 43.0	43.0 - 57.0	43.0 - 57.0	
>3.0 %	43.0 - 53.0	43.0 - 57.0	43.0 - 57.0	

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.

* When use rates of Spartan Advance are less than 32 oz, additional glyphosate will be required for effective control of emerged weeds.

SPARTAN ADVANCE may be applied as a preplant preemerge by ground in a minimum of 15 gallons of finished spray.

Early Preplant (Fall Application or Spring Application)

SPARTAN ADVANCE 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. See rate table 11 for application rates. SPARTAN ADVANCE may be applied in the spring from 60 days prior to planting up to planting. SPARTAN ADVANCE 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 ADVANCE runoff from rain or snow that may occur following application. SPARTAN ADVANCE may be tank mixed with other burndown herbicides to control emerged weeds in the fall or spring or with residual soil herbicides that are labeled for use on horseradish. Use full, recommended rates of burndown herbicides in combination with SPARTAN ADVANCE, 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.

Preemergence

SPARTAN ADVANCE may be applied preemerge 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. Use the higher SPARTAN ADVANCE rates on clay soils and/or soils with greater than 1% organic matter. SPARTAN ADVANCE may be applied with other pesticides registered for use on horseradish.

Precautions

These Crop Specific Use directions are based upon the interactive effects of SPARTAN ADVANCE 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 ADVANCE 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 ADVANCE. Consult university or extension weed management specialists for additional information on specific local SPARTAN ADVANCE

varieties or cultivary ...d any other pertinent information on SPARTAN ADVANCE under specific local conditions.

Restrictions

Do not apply more than 57.6 fluid ounces per acre of SPARTAN ADVANCE per application or per twelve-month period. The twelvemonth period is considered to begin upon the initial SPARTAN ADVANCE 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.

LIMA BEANS, SUCCULENT (38)

Table 12 SPARTAN ADVANCE Use Rate Table (Succulent Lima Beans) Spring Preemergence Applications **Broadcast Rate** Fluid Ounces SPARTAN ADVANCE per acre* Soil Texture % Organic Coarse Medium Fine Matter 16.0 - 26.0 21.0 - 43.0 26.0 - 43.0 <1.5% 1.5 – 3.0 % 21.0 - 32.0 26.0 - 43.0 32.0 - 43.0 32.0 - 43.0 >3.0 % 26.0 - 43.0 35.0 - 43.0Refer 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.

* When use rates of Spartan Advance are less than 32 oz, additional glyphosate will be required for effective control of emerged weeds.

SPARTAN ADVANCE may be applied to limas as a preemergence application prior to planting up to 3 days after planting as a preemerge soil application if seedlings have not broken the soil surface and if the seed furrow is completely closed. See rate table 12 for recommended application rates. Applications should be made with ground equipment in a minimum of 10 gallons of finished spray per acre.

Precautions

When applying SPARTAN ADVANCE to coarse textured soils, it is recommended that growers allow a minimum of 7-14 days from application to planting. Best results are achieved with SPARTAN ADVANCE 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 ADVANCE 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 ADVANCE 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 ADVANCE 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 ADVANCE. Consult university or extension weed management specialists for additional information on SPARTAN ADVANCE under specific local conditions.

Restrictions

Do not apply more than 44.8 fluid ounces per twelve-month period. The twelve-month period is considered to begin upon the initial SPARTAN ADVANCE application.

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Do not apply to coarse soils classified as sand, which have less than 1% organic matter.

SPARTA	N ADVANCE I (Mint)	Jse Rate T	able
• •	For New Planting App	lications	
Broadcast Rate	Fluid Ounces SPARTAN ADVANCE per acre		
	Soil Texture		
	Sc	oil Texture	
% Organic Matter	Coarse Sc	bil Texture Medium	Fine
% Organic <u>Matter</u> <1.5%	Coarse 32.0 – 43.0	Medium 43.0 – 57.0	Fine 57.0
% Organic Matter <1.5% 1.5 - 3.0 %	Sc Coarse 32.0 - 43.0 43.0 - 57.0	Medium 43.0 - 57.0 57.0 - 70.0	Fine 57.0 70.0

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.

New Planting Applications

SPARTAN ADVANCE may be applied to new mint plantings preemergence to the mint if seedlings have not broken the soil surface and if the seed furrow is completely closed. Refer to SPARTAN ADVANCE Use Rate Table 13 for the appropriate use rate for the soil type and organic matter content. The higher rates in the range are recommended for soils of pH less than 7.0.

Precautions

Applications made to mint that has emerged will result in severe injury to exposed plant tissue.

These Crop Specific Use directions are based upon the interactive effects of SPARTAN ADVANCE 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 ADVANCE 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 ADVANCE. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on SPARTAN ADVANCE under specific local conditions.

Restrictions

Apply SPARTAN ADVANCE only to new mint plantings before new growth emerges.

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

Do not apply more than 86.4 fluid ounces per acre of SPARTAN ADVANCE per twelve-month period. The twelve-month period is considered to begin upon the initial SPARTAN ADVANCE application.

LABEL TRACKING INFORMATION (40)

Label Code:

Replaces Label Code: New Product Label

EPA Approval Date:

Philadelphia, PA 19103 USA FMC Corporation Agricultural Products Group 1735 Market Street Philadelphia PA 19103 215-299-6000 Mustang Max, Brig مُعَرِيلُ, Aim, Authority, Rage D-Tech, SPARTAN ADVANCE and المالي — Trademarks of FMC Corporation, Philadelphia, PA 19103 USA

Roundup Ready – Trademark of Monsanto Technology LLC, St. Louis, MO 63167 USA

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