

# U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505P) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460 EPA Reg. Number:

432-1499

Date of Issuance:

JUL 26 2010

NOTICE OF PESTICIDE:

x RegistrationReregistration(under FIFRA, as amended)

Term of Issuance: conditional

Name of Pesticide Product:

BCS-AA10707 20WSP Herbicide

Name and Address of Registrant (include ZIP Code):

Bayer Environmental Science A Business Group of Bayer CropScience, LP PO Box 12014 2 T.W. Alexander Drive Research Triangle Park, NC 27709

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

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.

The 'Basic Formulation' dated 7/6/2009 is acceptable.

This product is conditionally registered in accordance with FIFRA provided that you:

- 1. Submit and/or cite all data required for registration review/reregistration of your product when the Agency requires all registrants of similar products to submit data.
- 2. Submit the data listed below:
  - a. Within one year of the date on this registration notice, Storage Stability (830.6317) and Corrosion Characteristics (830.6320) studies must be submitted. It is recommended that the observations be made at 0, 3, 6, 9, and 12 month intervals.
  - b. Within two years of the date on this registration notice, submit the following studies as a condition of registration:
    - -Guideline 850.1350: Estuarine/Marine Invertebrate Life Cycle
    - -Guideline 850.2300: Avian reproduction study on mallard duck (a second study is needed to reduce uncertainty and obviate the need to presume risk to this taxon)
- 3. Make the following label revisions:
  - a. Revise "EPA REG. NO.432-xxxx" to "EPA REG. NO. 432-1499"

Continued on Page 2

Signature of Approving Official:  Jim Tompkins	Date:
Project Manager 25 Herbicide Branch	JUL 26 2019
Registration Division (7/505P)	
EPA Form 8570-6	

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- b. Change the Hazards to Humans and Domestic Animals statements to "CAUTION: Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing."
- c. Change "General Information" to "Product Information." Change "General Use Precautions" to "Use Restrictions."
- d. On page 3, change "such as parks" to "including parks."
- e. On page 5, change "should not exceed the maximum" to "must not exceed the maximum."
- f. On Page 9, Footnote 1 at the top of page, change "The rate chosen should not exceed...." to "The rate chosen must not exceed...".
- g. On page 10, change "should not be mixed into the soil" to "must not be mixed into the soil".
- h. To page 11, to the "Non-Selective Non-Crop Uses" section specify for "hand held application only".
- i. To the Non-Selective NonCrop Uses section, specify for spot treatment only, and either remove "other hardscapes" or define other hardscapes.
- j. Change "Storage" to "Pesticide Storage" and also change "Container Disposal" to "Container Handling" in the storage and disposal section.
   In addition, revise "or by incineration; or, if allowed by State and local authorities, by burning. If burned, stay out of smoke" with the following:
   ...or, dispose of the empty outer foil pouch in the trash as long as WSP is unbroken."
- k. Add the following restrictions:

"For use on sod farms, golf courses, and non-crop areas (excluding lawns), do not apply within 25 feet of ponds, lakes, rivers, streams, ditches, wetlands, and habitat containing aquatic and semi-aquatic plants. For forestry uses, do not apply within 50 feet of ponds, lakes, rivers, streams, ditches, wetlands, and habitat containing aquatic and semi-aquatic plants"

"Do Not Apply by Air."

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1. The following spray drift language must be added to the label:

#### "Spray Drift Management

Spray equipment and weather affect spray drift. Consider all factors when making application decisions. Where states have more stringent regulations, they must be observed. Avoiding spray drift is the responsibility of the applicator or grower. To reduce the potential for drift, the application equipment must be set to apply medium to large droplets (i.e., ASAE Standard 572) with corresponding spray pressure. Use high flow rate nozzles to apply the highest practical spray volume. With most nozzle types, narrower spray angles produce larger droplets. Follow the nozzle manufacturer's directions on pressure, orientation, spray volume, etc., in order to minimize drift and optimize coverage and control.

#### Wind

Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and non-target plants are growing. Do not spray near sensitive plants if wind is gusty, below 2 mph, or in excess of 10 mph and moving in the direction of adjacent areas of applications when there is some air movement to determine the direction and distance of possible spray drift.

Local terrain may influence wind patterns; the applicator must be familiar with local conditions and understand how they may impact spray drift. Boom or nozzle shielding can reduce the effects of wind or air currents on drift. Verify that the shields do not interfere with uniform deposition of product prior to application.

#### Temperature Inversion

A surface temperature inversion (i.e., increasing temperature with increasing altitude) greatly increases the potential for drift. Avoid application when conditions are favorable to inversion. Presence of ground fog is a good indicator of a surface temperature inversion.

#### Sensitive Areas

Sensitive areas to this product are defined as bodies of water (ponds, lakes, rivers, streams, and ditches containing casual water), habitats of endangered species and non-labelled agricultural crop areas. Applicators must take all precautions necessary to keep spray drift from reaching sensitive areas.

#### Golf Course, Residential, and Commercial Lawns

Set the boom and make applications at the lowest height that safely permits uniform coverage of the soil and minimizes droplet evaporation. For use on golf courses and commercial lawns, the boom height must be no higher than 3 feet above the ground and nozzle tips must be set to spray out medium to very coarse spray droplets. Applications to residential lawns must be made by equipment that maintains coarse spray droplets (to reduce drift).

#### **Ornamentals**

For deciduous ornamental plants, the spray must be directed at the base of the plant or away from the plant but as not to come in contact with the foliage as some leaf malformations or discoloration may occur. Dormant deciduous trees are tolerant to indaziflam herbicide.

#### Conifers/Christmas Trees

Conifers including Christmas trees are tolerant to foliar applications of indaziflam. In Christmas tree farm operations, direct the spray to the base of the trees on a band or broadcast application.

m. Revise the Environmental Hazards statement to read as follows:

#### "Environmental Hazards:

This Product is toxic to fish, aquatic invertebrates, and plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean water mark. Do not contaminate water when disposing of rinseate or washwater. This product may impact water through spray drift or runoff. Follow directions for use to avoid spray drift and runoff. A level well maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential of this product entering water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours."

In addition, add the following Ground Water and Surface Water Advisory statements:

"This pesticide has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

This pesticide may impact water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application."

4. Submit production information (in pounds or gallons of product) for this product for the fiscal year in which the uses on this label are conditionally registered, in accordance with FIFRA §29. The fiscal year begins October 1 and ends September 30. The production information will be submitted to the Agency no later than November 15, following the end of the preceding fiscal year. This information must be submitted to:

Mr. Owen F. Beeder U.S. Environmental Protection Agency Office of Pesticide Programs Registration Division (7505P) 1200 Pennsylvania Avenue, NW Washington, DC 20460

5. Submit one (1) copy of the revised final 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 the label is enclosed for your records.

Enclosure

GROUP 7 HERBICIDE

# BCS-AA10717 20WSP Herbicide

Preemergent Herbicide for the Control of Annual Grasses, Annual Sedges, and Broadleaf Weeds in Turfgrass, Ornamentals, Nurseries, Christmas Trees, Landscape Plantings, Forestry, and Hardscapes in Non-crop Areas

#### DO NOT USE FOR THE MANUFACTURING OF FERTILIZER

1,3,5-Triazine-2,4-diamine, N-[(1R,2S)-2,3-dihydro-2,6-dimethyl-1H-inden-1-yl]-6-(fluoroethyl)	20%
OTHER INGREDIENTS:	80%
Total	

# KEEP OUT OF REACH OF CHILDREN CAUTION

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-800-331-2867

#### **FIRST AID**

If swallowed:	Call a poison control center or doctor immediately for treatment advice.
	Have person sip a glass of water if able to swallow.
•	Do not induce vomiting unless told to do so by a poison control center or doctor.
	Do not give anything to an unconscious person.
If in eyes:	Hold eyes 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.
	Call a poison control center or doctor for treatment advice.
If on skin or	Take off contaminated clothing.
clothing:	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
Have the produ	uct container or label with you when calling a poison control center or doctor or going for treatment.

ACCEPTED
with COMMENTS
In EPA Letter Dated

JUL 2 6 2010

Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.



M-304395-02-1

#### PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS CAUTION

Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the totlet. Remove and wash contaminated clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirt and long parits, chemical resistant gloves made of any waterproof material such as nitrile or butyl gloves, and shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **ENGINEERING CONTROLS STATEMENTS:**

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

#### **User Safety Recommendations**

Users should wash hands before eating, drinking, chewing gurn, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash body thoroughly and put on clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to fish, oysters, and non-target plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean water mark. Do not contaminate water when disposing of rinsate.

This product may contaminate water through drift of spray in wind. Follow precautions for use to avoid wind spray drift.

This product has a high potential for runoff and may contaminate water. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

This chemical has properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

#### DIRECTIONS FOR USE

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

Read entire label before using this product.

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

#### AGRICULTURAL USE REQUIREMENTS

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

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, chemical resistant gloves made of any waterproof material, and shoes plus socks.

#### NON AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep unprotected persons out of the treated areas until sprays have dried.

#### STORAGE AND DISPOSAL

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

#### STORAGE

Store in original container only. Store in a manner to prevent cross-contamination of other pesticides, fertilizer, food and feed. Do not store in or around the home. Store in a dry, locked storage area.

#### PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

#### CONTAINER DISPOSAL

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Dispose of in a sanitary landfill, or by incineration; or, if allowed by State and local authorities, by burning, if burned, stay out of smoke.

#### **GENERAL INFORMATION**

BCS-AA10717 20 WSP Herbicide is a selective, preemergence and post emergence (as noted) alkylazine herbicide for control of many annual grasses including crabgrass, goosegrass, and annual bluegrass and broadleaf weeds in turf (warm season turf and Kentucky bluegrass), ornamentals, hardscapes, and forestry.

BCS-AA10717 20 WSP Herbicide controls weeds by inhibiting cellulose biosynthesis (CB Inhibitor). Its primary sites of action are inhibition of seedling emergence and root development. Necrosis or yellowing may be observed if the herbicide is applied to herbaceous tissue such as leaves and green stems of susceptible plants.

The herbicide needs to be activated prior to weed germination for most effective control. For maximum activity against germinating weeds, BCS-AA10717 20 WSP Herbicide requires rainfall or impation (approximately 0.25 inches) within several weeks after application to activate the herbicide prior to weed germination. BCS-AA10717 20 WSP Herbicide will not control weeds that have emerged, except those that have been indicated on this label.

Apply BCS-AA10717 20 WSP Herbicide with a properly calibrated sprayer that will apply the spray solution uniformly. Uniform application is essential for satisfactory weed control. Calibrate the sprayer prior to use, according to the manufacturer's directions and check periodically to be certain that the equipment is working properly prior to each use.

#### **GENERAL USE PRECAUTIONS**

- Do not allow domestic animals to graze treated areas.
- Avoid contamination of water intended for imigation and domestic use.
- . If mixing with other pesticides, follow use precautions and restrictions on this label and for all tank mix partners.
- Water soluble packs of BCS-AA10717 20 WSP Herbicide are intended to be added to the spray tank without opening. Do not cut the water soluble packs open for any reason.
- Do not apply BCS-AA10717 20 WSP Herbicide by air.

#### TURF, GOLF COURSES, SPORTS TURF, and SOD FARMS

For use on established turf in areas such as parks, cemeteries, golf courses (roughs, tees, and fairways), sod farms, sports fields, and lawns, both home and commercial. Established turf is defined as turf 1 year after seeding, and 4 months after sprigging or sodding. DO NOT APPLY BCS-AA10717 20 WSP Herbicide to golf course putting greens.

#### **Tolerance**

BCS-AA10717 20 WSP Herbicide may be used on the following turf types and their cultivars\*:

#### Warm season turfgrasses and their cultivars

- Bermudagrass\*\* (Cynodon dactylon) (and hybrids)-Baby, Common, GN1, Tifsport, Tifton 10, Tifway 419,
- Zoysiagrass (Zoysia japonica)-Cavalier, Crowne, DeAnza, El Toro, GNZ, Jamar, Meyer, Palisades, Zenith, Zeon
- Centipedegrass\*\* (Eremochloa ophiuroides)- Tifblair
- St. Augustinegrass\*\* (Stenotaphrum secundatum)-Floratam, Raleigh
- Seashore paspalum (Paspalum vaginatum)—Seaisle Supreme
- Buffalograss (Buchloe dactyloides)

#### Cool season turfgrass and its cultivars

Kentucky bluegrass (Poa pratensis)

\*Commonly grown cultivars of turf are constantly changing. Acceptable tolerance on one turf cultivar may not be the same as on another. Before making a large scale application, test a small area of turf with BCS-AA10717 20 WSP Herbicide to assess acceptable turf tolerance for those cultivars not specifically listed on this label, and always follow use precautions for stressed or thin turf.

\*\*Application of BCS-AA10717 20 WSP Herbicide may temporarily inhibit pegging of bermudagrass, centipedegrass, and St. Augustinegrass.

BCS-AA10717 20 WSP Herbicide may cause unacceptable injury on some turf types. <u>Do not use</u> on the following turf types or on turf that is a mixture containing any of these grasses, unless removal is desired.

- Creeping bentgrass (Agrostis palustris)\*
- Annual bluegrass (Poa annua)
- Fine fescue (Festuca rubra)
- Turf type tall fescue (Festuca arundinaceae)
- Kikuyugrass (Pennisetum clandestinum)
- Perennial ryegrass (Lolium perenne)

\*Provide an untreated buffer zone of 10 ft around a bentgrass green prior to application of BCS-AA10717 20 WSP Herbicide on a tolerant turf such as beimudagrass.

#### Use Precautions for BCS-AA10717 20 WSP Herbicide on Turf

- · Do not apply to saturated soil.
- Do not apply to newly seeded turf. Turf is considered to be established one year after planting.
- Do not apply to newly sprigged turf until it has been established for at least 4 months.
- Do not apply to newly sodded turf until it has been established for at least 4 months.
- Do not apply to thin turf or to turf that is showing signs of stress.
- Do not apply to turf that has been recently been verticul until the turf has recovered.
- Do not apply by chemigation or through any type of irrigation system.

#### Compatibility and Mixing

#### **COMPATIBILITY TESTING WITH OTHER PESTICIDES**

A compatibility test must be conducted with any potential tank mix partner with BCS-AA10717 20 WSP Herbicide. Using a clear container, conduct the test as described below:

- Fill the container three-quarters full with water.
- Add the appropriate amount of tank mix partner in the following order: (a) dry flowable, (b) BCS-AA10717 20 WSP Herbicide, (c) aqueous suspensions, (d) flowables, (e) liquids and (f) solutions and emulsifiable or liquid concentrates. Shake or gently stir after each addition to mix thoroughly.
- 3. After adding all ingredients, let the mixture stand for 15 minutes and look for separation, large flakes, precipitates, gels, and heavy oily film or other signs of incompatibility.
- 4. If the compatibility test shows signs of incompatibility, do not tank mix the product tested with BCS-AA10717 20 WSP Herbicide.

#### **MIXING INSTRUCTIONS**

BCS-AA10717 20 WSP Herbicide is formulated in water soluble packs. The water soluble packages should not be allowed to become wet prior to addition to the spray tank. Use chemical resistant gloves made of water proof material. Reseal the container to protect any unused packs from moisture.

BCS-AA10717 20 WSP Herbicide should be added to the tank and agitated, prior to introduction of a non-selective herbicide such as FINALE®. Please refer to the non-selective herbicide label for information on surfactant and spray volume to use. Mix the amount of spray needed for immediate application needs. Settling can occur if spray mixture is allowed to sit over an extended period of time.

#### Use Rates, Timings, and Maximum Seasonal Rate for BCS-AA10717 20 WSP Herbicide on Turf

Apply BCS-AA10717 20 WSP Herbicide prior to weed seed germination. BCS-AA10717 20 WSP Herbicide does not generally control weeds that have emerged. Rake turn area free of leaves. For best results, water the turn after application to activate the herbicide, if rain is not expected shortly after application. Mow if necessary if the turn is excessively high, so that the spray reaches the soil surface. Measure the area to be treated and apply the amount required uniformly.

The desired rate of BCS-AA10717 20 WSP Herbicide in each application and the interval between applications depends on the turfgrass being treated, the residual weed activity required, and restrictions on the maximum amount of BCS-AA10717 20 WSP Herbicide per season. BCS-AA10717 20 WSP Herbicide may be applied at 1.8-5.7 oz per A. Applications of BCS-AA10717 20 WSP Herbicide should not exceed the maximum label rate in a contiguous 12 month period or exceed the maximum single application rate for a specific turf type.

Do not exceed a total maximum use rate of 7.1 oz per A in a contiguous 12 month period.

Use patterns for BCS-AA10717 20 WSP Herbicide include, but are not limited to:

- single application in the spring, summer, or fall
- summer followed by a winter application
- late winter followed by a spring application
- · fall application followed by a spring application
- spring application followed by a fall application within the same 12 month period

Applications made in the fall may control weeds in the following spring. The interval between consecutive applications must be 3 months or more.

For late fall applications, apply BCS-AA10717 20 WSP Herbicide prior to when the ground freezes.

#### Non Overseeded Turf

Apply BCS-AA10717 20 WSP Herbicide in late winter at normal, regionally established timings for pre-emergence herbicides. If turf is domant, make applications at least 2 weeks prior to greenup.

#### **Application Volume**

For optimum weed control, apply BCS-AA10717 20 WSP Herbicide in 1-4 gallons of water per 1,000 sq ft.

#### **Tank Mix Combinations on Turf**

Tank-mix combinations of BCS-AA10717 20 WSP Herbicide plus a non-selective herbicide such as FINALE® will control existing undesirable vegetation in dormant warm season grasses such as bermudagrass and zoysiagrass. Applied as a broadcast spray, BCS-AA10717 20 WSP Herbicide plus a non-selective herbicide such as FINALE® will provide pre and postemergence control of susceptible species listed on the respective labels of the two herbicides.

Tank-mix combinations of BCS-AA10717 20 WSP Herbicide plus a selective herbicide such as REVOLVER® will provide pre and post emergence control of weeds common to both labels in bermudagrass and zoysiagrass. Applications may be made to non overseeded turf as well as turf overseeded with a cool season grass provided that transition of the cool season turf is desired. Follow all use restrictions on both labels.

#### Rotation of BCS-AA10717 20 WSP Herbicide with Herbicides of Other Modes of Action on Turf

BCS-AA10717 20 WSP Herbicide may also be used in programs with other preemergence herbicides with different modes of action, when resistance of a specific weed controlled by both herbicides is confirmed. For example, rotation of BCS-AA10717 20 WSP Herbicide in one season followed by a preemergent herbicide with another mode of action will reduce existing populations and minimize further development of resistant weeds.

# Application Rates and Area Treated for One, Water Soluble Pack of BCS-AA10717 20 WSP Herbicide

Rate	Rate		
Ounces product	Ounces product	Area treated water solub	
per 1,000 sq ft	per A	sq ft	A
0.041	1.8	84,700	1.9
0.049	2.1	72,600	1.7
0.066	2.9	54,500	1.3
0.082	3.5	43,600	1.0
0.098	4.3	36,300	0.8
0.115	5	31,100	0.7
0.131	5.7	27,200	0.6
0.163	7.1	21,800	0.5

One water soluble pack of BCS-AA10717 20 WSP Herbicide contains 3.5 oz and will treat 1 A if applied at 0.082 oz of product per 1,000 sq ft. If the desired rate is reduced to 0.041 oz of product per 1,000 sq ft, for example, one water soluble pack could treat 1.9 acres. By changing nozzles, application volume, applicator speed, or nozzle type, the rate and area treated can be adjusted further for one water soluble pack.

#### Application Rates for BCS-AA10717 20 WSP Herbicide on Turf Types

Turf Type	Application Rate	
	Ounces of Product per A	
Bermudagrass	1.8 - 5.7	
Zoysiagrass		
Centipedegrass		
Seashore paspalum		
Buffalograss		
St. Augustinegrass	1.8 – 5.0	
Kentucky bluegrass	1.8 - 4.3	

Weeds Controlled or Suppressed by E Minimum Use Rates <sup>1</sup>	
At 1.8-2.1 oz of 20WSP Herbicide per A, the following	i weeds are controlled
	, 1000000000000000000000000000000000000
Broadleaf Weeds	
American black nightshade	Solanum americanum
Canada thistle, common (seedlings)	Circlum arvense
Carpetweed	Mollugo verticillata
Com speedwell	Veronica arvensis
Cudweed, Linear-leaf	Gnaphalium purpureum
Curly dock (seedlings)	Rumex crispus
Cutleaf eveningprimrose	Oenothera laciniata
Dandelion, common (seedlings)	Taraxacum officinale
Gromwell, Yellow	Amsinckia calycina
Groundsel, common	Senecio vulgaris
Hairy fleabane	Engeron bonariensis
Lambsquarters, common	Chenopodium album
Little mallow	Malve parviflora
Mouse-ear chickweed	Cerastium vulgatum
Panicle willowweed	Epilobium paniculatum
Plantain, Buckhorn	Plantago lanceolata
Plantain, Paleseed	Plantago virginica
Prostrate knotweed	Polýgonum aviculare
Purslane, common	Portulaca oleracea
Redmaids	Calandrinia caulescens
Redstem fleabane/Storksbill	Erodium cicutarium
Shepherd's-purse	Capsella bursa-pastoris
Sowthistle, Annual	Sonchus olerachus
Spotted catsear	Hypochoeris redica
Swinecress	Coronopus didymus
Wild buckwheat (seedlings)	Polygonum convolvulus
Wild mustard	Sinapis arvensis
Grasses	
Foxtail, Giant	Setaria faberi
Foxtail, Green	Setaria viridis
Mouse barley	Hordeum murinum
Ryegrass, Italian	Lolium multiflorum
Tufted lovegrass	Eragrostis pectinacea
	a sale para para sale
	rolled at 2.9 oz of BCS-AA10717 20 WSP Herbicide per A.
Broadleaf Weeds	
Prostrate spurge	Euphorbia humifusa
Redroot pigweed	Amaranthus retroflexus

Grasses		
Ryegrass, Perennial	Lolium perenne	
In addition to the above, the following weeds are o	controlled at 3.5-5.0 oz of BCS-AA10717 20 WSP Herbicide per A	
Broadleaf Weeds		
California burclover	Medicago polymorpha	
Florida pusley	Richardia scabra	
Hairy nightshade	Solanum sarrachoides	
Henbit	Lamium amplexicaule	
Horseweed	Engeron canadensis	
Kochia	Kochia scoparia	
Lawn burweed	Soliva pterosperma	
Plantain	Plantago sp	
Prostrate pigweed	Amaranthus blitoides	
Red tasselflower_	Emilia sonchifolia.	
Tropic ageratum	Ageratum conycoides	
Grasses		
Annual bluegrass/Poa 2	. Poa annua	
Barnyardgrass, common	Echinochloa cruś-galli	
Cheat	Bromus secalinus	
Crabgrass	Digitaria sp	
Crabgrass, Henry	Digitaria adscendens	
Crabgrass, Large/Hairy	Digitaria sanguinalis	
Crabgrass, Smooth	Digitaria ischaemum	
Foxtail brome	Bromus rubens	
Goosegrass	Eleusine Indica	
Guineagrass	Panicum maximum	
In addition to the above, the following weeds are o	controlled at 5.7 oz of BCS-AA10717 20 WSP Herbicide per A	
Broadleaf Weeds		
Black medic	Medicago lupulina	
Black mustard	Brassica nigra	_
Chickweed, common	Stellaria media	
Clover, White	Trifolium repens	
London rocket	Sisymbrium irio	_
In addition to the above, the following weeds are controlled at 7.1 oz of BCS-AA10717 20 WSP Herbicide per A		
Broadleaf Weeds	Making at a stations	
False chamomile	Matricaria maritima	
Wild carrot	Daucus carota	<u> </u>
Woodsorrel/Oxalis	Oxalis sp	
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Grasses		
Foxtail, Yellow	Penniset	tum glaucum
The following weeds are suppressed at	5.7 oz of BCS-AA10717 20 WSP Herbid	cide per A.
Sedge, Annual		compressus

<sup>&</sup>lt;sup>1</sup> The rates listed are the minimum use rates for specific weeds. Higher rates should be used if weed populations are high or longer residual control is desired. The rate chosen should not exceed the tolerance for an individual turf type or exceed the total of BCS-AA10717 20 WSP Herbicide allowed for a contiguous 12 month period.

#### **Overseeded Warm Season Turf**

#### Spring timing for bermudagrass overseeded with perennial ryegrass

Application of BCS-AA10717 20 WSP Herbicide to overseeded bermudagrass will damage perennial ryegrass and reduce ryegrass stand. Application of BCS-AA10717 20 WSP Herbicide at this timing may assist in transitioning overseeded turf to bermudagrass.

#### Timing immediately prior to overseeding

BCS-AA10717 20 WSP Herbicide may be used to control weeds in bermudagrass overseeded with a cool season grass provided that the interval between application and seeding is at least 8 months. Applications made sooner than 8 months may reduce the establishment of the cool season grass and reduce turi coverage.

#### Seeding, Re-Seeding, and Sodding Turf

Timing of seeding relative to an application of BCS-AA10717 20 WSP Herbicide needs to be tracked carefully. The herbicide can damage newly emerged seedlings, inhibit the emergence of seed, or reduce the establishment of sod. Seeding or sodding into turf treated with BCS-AA10717 20 WSP Herbicide should be delayed until at least 4 months after application. Applications made sooner than 4 months may reduce stand establishment and turf vigor.

#### Bermudagrass Planted by Sprigs

BCS-AA10717 20 WSP Herbicide may be applied to bermudagrass sprigs. The sprigs need to be well rooted prior to application. Apply the herbicide no sooner than 4 months after sprigging to allow for good stand establishment.

#### FIELD GROWN ORNAMENTAL AND CHRISTMAS TREE APPLICATION

Apply BCS-AA10717 20 WSP Herbicide as a directed spray, prior to weed seed germination to the soil surface around dormant or actively growing ornamentals as listed in the table below. The herbicide may also be applied as an over-the-top spray on dormant woody species or conifers only. BCS-AA10717 20 WSP Herbicide should be applied to established plants and not transplants/liners/rooted cuttings.

AMOUNT TO USE: Apply BCS-AA10717 20 WSP Herbicide as a broadcast, directed spray or over-the-top treatment, in a minimum of 1 gallon per 1,000 sq ft, to ornamentals at 0.066-0.163 oz per 1,000 sq ft, depending on the weeds to be controlled as listed in the "Weeds Controlled" table. Remove existing weed growth before application or use a post emergence herbicide. A subsequent application of BCS-AA10717 20 WSP Herbicide can be made 3 or more months after the initial application.

The maximum application rate allowed in a contiguous 12 month period is 0.163 oz of product per 1,000 sq ft or 7.1 oz per A.

<sup>&</sup>lt;sup>2</sup> Annual bluegrass control—BCS-AA10717.20 WSP Herbicide has both preemergence and post emergence activity against annual bluegrass. Apply BCS-AA10717.20 WSP Herbicide for post emergence control of annual bluegrass prior to tillering. Preemergence control is best if the herbicide is applied prior to germination in the fall. The pre and post control allows the herbicide to be applied over a period of several months in the fall. A typical application period is August through December. The best timing is dependent on local conditions.

Rainfall or overhead irrigation (approximately 0.25 inch) immediately after application of BCS-AA10717 20 WSP Herbicide will improve weed control activity. Rainfall or overhead irrigation immediately after over-the-top sprays helps to move the BCS-AA10717 20 WSP Herbicide to the soil surface.

#### **Application Volume**

For optimum weed control, apply BCS-AA10717 20 WSP Herbicide in 1-4 gallons of water per 1,000 sq ft.

#### **Precautions for Ornamentals**

- BCS-AA10717 20 WSP Herbicide should not be mixed into the soil. Cultivating or disturbing the soil surface after application
  may reduce weed control activity. Cultivation of soil immediately prior to application may also reduce effectiveness.
- Do not use BCS-AA10717 20 WSP Herbicide on plants grown in a greenhouse.
- Do not use non-selective herbicides such as FINALE® for over-the-top applications with BCS-AA10717 20 WSP Herbicide on ornamentals. Avoid contact of spray containing a non-selective herbicide with foliage, stems, green bark, or bare roots of desirable turifgrasses, trees, shrubs, or other desirable vegetation, since severe damage or destruction may result. If spraying areas adjacent to desirable plants with a non-selective herbicide, use a shield made of cardboard, sheet metal, or ply-board while spraying to help prevent spray from contacting foliage of desirable plants.
- When making a directed application of BCS-AA10717 20 WSP Herbicide to the soil surrounding an actively growing omamental, be careful not to apply to foliage of the omamental. Damage may result.

#### **Tolerance**

BCS-AA10717 20 WSP Herbicide may be used to control weeds in a variety of ornamentals' plantings including conifers. Remove existing weed growth before application for best results or treat with a postemergence herbicide. Irrigate after application to activate BCS-AA10717 20 WSP Herbicide.

#### Commercial Nursery and Landscape Plantings

#### **Tolerant Ornamentals**

BCS-AA10717 20 WSP. Herbicide at 0.066-0.163 oz per 1,000 sq. ft. is effective in controlling annual grasses and broadleaf weeds as a directed spray to soil surrounding the following organicals.

Almond	Prunus dulcis
American sweetgum	Liquidambar styraciflua
Ash/European ash	Fraxinus excelsior
Ash/Flowering ash	Fraxinus ornus
Blackthorn	Prunus spinosa
Catalpa/Southern catalpa	Catalpa bignonioides
Cherry/Bird cherry	Prunus padus
Cherry laurel	Prunus laurocerasus
Cherry/Portuguese laurel cherry	Prunus Iusitanica
Cherry/Wild cherry	Prunus spp
Cotoneaster	Cotoneaster franchetti
Crabapple	Malus spp
Cypress/Leyland cypress	Cupressocyparis leylandii
Daylily	Hemerocallis spp cv Stella D'Oro
Dogwood/American dogwood	Comus florida
Dogwood/Siberian dogwood	Comus alba.
Elm/Smooth leaved elm	Ulmus minor
Forsythia	Forsythia intermedia
Hibiscus	Hibiscus spp
Honeysuckle/Tartarian honeysuckle	Lonicera tatarica Page 10 of 13

Judas tree	Cercis siliquastrum	
Lilac	Syringa vulgaris	:
Linden	Tilia codata.	
Linden/Large leafed linden	Tilia platyphyllos	,
Magnolia/Saucer magnolia	Magnolia soulangeana	
Mock orange	Philadelphus sp	
Oregon grape holly	Mahonia aquifolium	* 2
Privet/Common privet	Ligustrum vulgare	
Pagoda tree	Sophora japonica	
Sambuscus	Sambuscus ramosa	
Serviceberry/Canadian serviceberry	Amelanchier canadensis	
Silverberry	Eleagnus spp	
Smoketree/American smoketree	Cotinus obovetus	<u>i</u>
Spiraea	Spiraea japonica	
Sweetgum/American sweetgum	Liquidambar styraciflua	
Sycamore/American sycamore	Platanus occidentalis	
Vibumum	Vibumum tinus	
Viburnum/Water elder	Vibumum opulus	
Weigela	Weigela florida	
Willow/Pussy willow	Salix caprea	
Willow/Weeping willow	Salix babylonica	
Yew/English yew	Taxus baccata	

### BCS-AA10717 20 WSP Herbicide at 0.066-0.163 oz per 1,000 sq. ft. may also be applied over-the-top of the following domaint ornamentals.

Cherry laurel	Prunus laurocerasus	
Cherry/Portuguese laurel cherry	Prunus lusitanica	
Siberian dogwood	Comus alba	
Photinia	Photinia fraseri	
Serviceberry/Canadian.serviceberry	Amelanchier canadensis	
Smoketree/American smoketree	Cotinus obovatus	
Viburnum/Water elder	Vibumum opulus	
Willow/Weeping willow	Salix babylonica	

Commonly grown cultivars of ornamentals are constantly changing. Acceptable tolerance on one ornamental cultivar may not be the same as on another. Before making a large scale application, test a representative number of a new cultivar with BCS-AA10717 20 WSP Herbicide to assess acceptable tolerance for directed or over-the-top applications.

#### **Non-Selective Non-Crop Uses**

For long term control of annual weeds in non crop areas including patios, walkways, and other hardscapes, use 3.5-7.1 oz of BCS-AA10717 20 WSP Herbicide per A. Weeds controlled are listed in the "Weeds Controlled" table. For difficult-to-control weeds, more extended control, use 7.1 oz of BCS-AA10717 20 WSP Herbicide per A. Do not exceed 7.1 oz per A in a contiguous 12 months. If weeds are present at the time of application, tank mix a post emergence herbicide such as Finale, 2,4 D, or glyphosate for control of existing weeds. Observe all use restrictions on this label and on the label of the tank mix partner.

#### Forestry - Conifer and Hardwood Release

AA10717 20 WSP Herbicide may be used for preemergent residual control of certain weeds in establishment of conifer and hardwood forests. Make a broadcast application of 3.5-7.1 oz /A of AA10717 20 WSP Herbicide after transplanting when the soil has settled. A repeat application may be made 3 months after the first application. Use 7.1 oz/A for longer residual control. The total of AA10717 20 WSP Herbicide applied in a contiguous 12 month period, however, must not exceed 7.1 oz/A. AA10717 20 WSP Herbicide may be tank-mixed with other pre and post emergent herbicides for broader spectrum of control and for control of existing weeds provided that all restrictions for both products are observed.

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#### **Precautions For Non-Crop and Forestry Uses**

Do not use BCS-AA10717 20 WSP Herbicide near environmentally sensitive areas including ponds, lakes, nivers, or streams.

#### IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions; Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

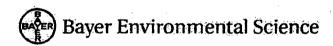
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LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

#### **NET CONTENTS:**

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#### PRODUCED FOR



Bayer Environmental Science
A Business Group of Bayer CropScience, LP
PO Box 12014 2 T.W. Alexander Drive
Research Triangle Park, NC 27709

AA10717 20WSP Herbicide (PENDING) SUBMITTED 07/22/08

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



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Mr. Richard Gorrell
Bayer Environmental Science
A Business Group of Bayer CropScience, LP
PO Box 12014 2 T.W. Alexander Drive
Research Triangle Park, NC 27709

AUG 1 2 2010

Subject:

Label Amendment

Product Name: SPECTICLE 20WSP Herbicide

EPA Registration Number: 432-1499

Decision Number:

The label amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you make the following change to the product labeling:

- a. Change the Hazards to Humans and Domestic Animals statements to "CAUTION: Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing."
- b. Change "General Information" to "Product Information."
- c. On page 3 in the first paragraph of the product information section, change "such as golf courses...and cemeteries" to "including golf courses...and cemeteries"
- d. On page 3 revise the first sentence of the buffer restriction "For use on turf and other non-crop uses, do not apply within 25 feet of ponds, lakes, rivers, streams, ditches, wetlands, and habitat containing aquatic and semi-aquatic plants." to read as follows:
  - "For uses on sod farms, golf courses, and non-crop areas (excluding lawns), do not apply within 25 feet of ponds, lakes, rivers, streams, ditches, wetlands, and habitat containing aquatic and semi-aquatic plants."
- e. Remove all aerial application information in the Spray Drift Management section and revise the use restriction, "Do not apply SPECTICLE 20WSP by air except for forestry uses" to the following:

"Do not apply SPECTICLE 20WSP by air."

In addition, add "per acre" after "Do not exceed 5 oz of SPECTICLE 20WSP" and "Do not exceed 7.1 oz of SPECTICLE 20WSP" in the 'Use Restrictions' section.

f. On page 4, revise the 'Sensitive Areas' section to read as follows:

"Sensitive areas to SPECTICLE 20WSP are defined as bodies of water (ponds, lakes, rivers, streams, and ditches containing casual water), wetlands, habitats for endangered species, and non-labelled agricultural crop areas. Applicators must take all precautions necessary to keep spray drift from reaching sensitive areas."

Page 2 EPA Reg. No. 432-1499 Label Amendment

g. On page 6, the last sentence, "Multiple applications should be made at least 4-8 weeks after the previous application" must be revised to the following:

"A second application can be made 3 months after the first application."

- h. Remove "General" from the table title on page 6, "General Use Rates for SPECTICLE 20WSP"
- i. After the first sentence of the 'Annual Bluegrass Control' section on page 7, "Preemergence applications of SPECTICLE 20WSP should generally be made between August and December depending on the germination of annual bluegrass in each geographical zone." add the sentence, "Applications must be made prior to when the ground freezes."
- j. To the Non-Selective NonCrop Uses section, remove the text "but not limited to" in the first and second paragraphs where sites are being listed.
- k. Add "non-bearing" before "shrubs and trees" in the sentence, "SPECTICLE 20 WSP may be applied to shrubs and trees not listed on this label after treating a small number of such plants at the maximum rate" on page 14 of 15.
- Change "Storage" to "Pesticide Storage" and also change "Container Disposal" to "Container Handling" in the storage and disposal section.
   In addition, revise "or by incineration; or, if allowed by State and local authorities, by burning. If burned, stay out of smoke" with the following:

   ...or, dispose of the empty outer foil pouch in the trash as long as WSP is unbroken."
- m. Add the following buffer restriction to the 'Forestry- Conifer and Hardwood Release' section:

"Do not apply within 50 feet of ponds, lakes, rivers, streams, ditches, wetlands and habitat containing aquatic and semi-aquatic plants."

One copy of the label stamped "Accepted with Comments" is enclosed for your records. Products shipped after 18 months from the date on this notice or the next printing of the label whichever occurs first, must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA. Your release for shipment of this product constitutes acceptance of these conditions. This label supersedes all previous accepted labels. You must submit one copy of the final printed label before the product is released for shipment.

Sincerery

OR Jim Tompkins

Product Manager (25)

Herbicide Branch

Registration Division (7505P)

# SPECTICLE 20WSP Herbicide

Preemergent Herbicide for the Control of Annual Grasses, Annual Sedges, and Broadleaf Weeds in Turfgrass, Landscape Ornamentals, Ornamentals in Nurseries, Christmas Trees, Hardscapes and Forestry Areas

DO NOT USE FOR THE MANUFACTU	RING OF FERTILIZER	
ACTIVE INGREDIENT: Indaziflam	ACCEPTED	20%
OTHER INGREDIENTS:	in EPA Letter Dated AUG 12 20	
Total	Under the Federal Incomiside	100%
	Fungicide, and Rodenticide Act	
EPA Reg. No. 432-1499	es amissided, for the pesticide	EPA Est.

# KEEP OUT OF REACH OF CHILDREN CAUTION

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-800-331-2867

#### **FIRST AID**

If swallowed:	Call a poison control center or doctor immediately for treatment advice.
	Have person sip a glass of water if able to swallow.
	Do not induce vomiting unless told to do so by a poison control center or doctor.
	Do not give anything to an unconscious person.
If in eyes:	Hold eyes 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.
	Call a poison control center or doctor for treatment advice.
If on skin or clothing:	Take off contaminated clothing.
	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
Have the product co	ontainer or label with you when calling a poison control center or doctor or going for treatment.

#### PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS

**CAUTION** 

Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, chemical resistant gloves made of any waterproof material such as nitrile or butyl gloves, and shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **ENGINEERING CONTROLS STATEMENTS:**

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### **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 body thoroughly and put on clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to fish, aquatic invertebrates, and plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean water mark. Do not contaminate water when disposing of equipment rinsate or washwater. This product may enter water through spray drift or runoff. Follow directions for use to avoid spray drift and runoff. A level well maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential for getting into water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

This product may enter water through drift of spray in wind. Follow precautions for use to avoid wind spray drift.

Surface Water Advisory: This pesticide may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application.

Ground Water Advisory: This pesticide has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

#### DIRECTIONS FOR USE

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

Read entire label before using this product.

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

#### AGRICULTURAL USE REQUIREMENTS

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

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, chemical resistant gloves made of any waterproof material, and shoes plus socks.

#### NON AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep unprotected persons out of the treated areas until sprays have dried.

#### STORAGE AND DISPOSAL

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

#### **STORAGE**

Store in original container only. Store in a manner to prevent cross-contamination of other pesticides, fertilizer, food and feed. Do not store in or around the home. Store in a dry, locked storage area.

#### **PESTICIDE DISPOSAL**

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

#### **CONTAINER DISPOSAL**

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Dispose of in a sanitary landfill, or by incineration; or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

#### GENERAL INFORMATION

SPECTICLE 20WSP™ is a selective, preemergence alkylazine herbicide. It is not intended for post emergent application. SPECTICLE 20WSP controls many annual grasses including crabgrass, goosegrass, annual bluegrass, annual sedges, and broadleaf weeds in turf, ornamentals (nursery and residential), hedgerows, hardscapes, Christmas trees, and conifers. SPECTICLE 20WSP can be used only on <u>established</u> turf in areas such as golf courses (roughs, tees, and fairways), sod farms, sports fields, lawns, both home and commercial, parks and cemeteries.

SPECTICLE 20WSP controls weeds by reducing the emergence of seedlings through inhibition of cellulose biosynthesis (CB Inhibitor). Necrosis or yellowing may be observed if the herbicide is applied to herbaceous tissue such as leaves and green stems of susceptible plants. SPECTICLE 20WSP does not control tubers, rhizomes, bulbs, corms, existing rootstocks, and woody vegetation.

The herbicide needs to be activated prior to weed germination for most effective control. For maximum activity against germinating weeds, **SPECTICLE 20WSP** requires rainfall or irrigation prior to weed germination.

For use on turf and other non-crop uses, do not apply within 25 feet of ponds, lakes, rivers, streams, ditches, wetlands, and habitat containing aquatic and semi-aquatic plants. For forestry, do not apply within 50 feet of ponds, lakes, rivers, streams, ditches, wetlands, and habitat containing aquatic and semi-aquatic plants.

#### **USE RESTRICTIONS**

- Do not exceed 5 oz of SPECTICLE 20WSP in a single application for any use.
- Do not exceed 7.1 oz of SPECTICLE 20WSP for all applications within a calendar year or in a 12 month period from the previous application.
- Do not apply SPECTICLE 20WSP to newly seeded turf.
- Do not apply SPECTICLE 20WSP through an irrigation or chemigation system.
- Do not apply SPECTICLE 20WSP by air except for forestry uses.
- Avoid contamination of water intended for irrigation and domestic use.
- Follow use precautions and restrictions on this label and for all tank mix partners, if mixing with other pesticides.
- Water soluble packs of SPECTICLE 20WSP are intended to be added to the spray tank without opening. Do not cut the water soluble packs open for any reason.

#### SPRAY DRIFT MANAGEMENT

Spray equipment and weather affect spray drift. Consider all factors when making application decisions. Where states have more stringent regulations, they must be observed. Avoiding spray drift is the responsibility of the applicator or grower. To reduce the potential for drift, the application equipment must be set to apply medium to large droplets (i.e., ASAE Standard 572) with corresponding spray pressure. Use high flow rate nozzles to apply the highest practical spray volume. With most nozzle types, narrower spray angles produce larger droplets. Follow the nozzle manufacturer's directions on pressure, orientation, spray volume, etc., in order to minimize drift and optimize coverage and control.

#### Wind

Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if wind is gusty, below 2 mph, or in excess of 10 mph and moving in the direction of adjacent areas of sensitive crops or plants. Do not apply during temperature inversions. Always make applications when there is some air movement to determine the direction and distance of possible spray drift.

Local terrain may influence wind patterns; the applicator should be familiar with local conditions and understand how they may impact spray drift. Boom or nozzle shielding can reduce the effects of wind or air currents on drift. Verify that the shields do not interfere with uniform deposition of product prior to application.

#### Aerial Application (for forestry use only)

When applying by air only, orient nozzles so that the spray is applied backwards, parallel to the airstream. This practice will produce larger droplets than other nozzle orientations. With fixed-wing aircraft, the length of the boom should not exceed 3/4 the length of the wing. For helicopters, use a boom length and position that prevents the spray from entering the rotor vortices. Use a minimum of 5 gallons or more of spray volume when applying by air.

#### Temperature Inversion

A surface temperature inversion (i.e., increasing temperature with increasing altitude) greatly increases the potential for drift. Avoid application when conditions are favorable to inversion. Presence of ground fog is a good indicator of a surface temperature inversion.

#### Sensitive Areas

Sensitive areas are areas where the application of **SPECTICLE 20 WSP** is not labeled. These include bodies of water (ponds, lakes, rivers, streams, and ditches containing casual water), habitats for endangered species, and non-target plants including agricultural crop areas. Applications of **SPECTICLE 20 WSP** need to be made when wind is blowing away from sensitive areas.

#### Spray Drift Management (Golf Course; Residential, and Commercial Lawns):

Set the boom and make applications at the lowest height that safely permits uniform coverage of the soil and minimizes droplet evaporation. For use on golf courses and commercial lawns, the boom height must be no higher than 1-3 feet above the ground and nozzles tips must be set to spray out medium to very coarse spray droplets. Applications to residential lawns must be made by equipment that maintains coarse spray droplets (to reduce drift).

#### Spray Drift Management (Ornamentals):

For deciduous ornamental plants, the spray must be directed at the base of the plant or away from the plant but as not to come in contact with the foliage as some leaf malformations or discoloration may occur. Dormant deciduous trees are tolerant to **SPECTICLE 20 WSP**.

#### Spray Drift Management (Conifers/Christmas Trees):

Conifers including Christmas trees are tolerant to foliar applications of **SPECTICLE 20 WSP**. In Christmas tree farm operations, the common practice is to direct the spray to the base of the trees on a band or broadcast application.

#### APPLICATION INFORMATION

Apply SPECTICLE 20WSP with a properly calibrated sprayer according to the manufacturer's directions and check periodically to be certain that the equipment is working properly prior to each use. Uniform application is essential for satisfactory weed control.

#### **Application Volume**

Apply SPECTICLE 20WSP in a minimum of 20 gallons of water per acre (2 quarts of water per 1000 sq ft) and ensure adequate coverage for optimum weed control.

#### **IRRIGATION AND WATERING AFTER APPLICATION**

To activate SPECTICLE 20WSP for maximum herbicidal benefit, irrigate turf treated with SPECTICLE 20WSP within 2 days after application to move the herbicide into the soil. With dry soil, use a minimum of 0.125-0.25 inches of irrigation water, and with soil at or greater than field capacity, the amount of irrigation water should be reduced. In either case, do not create conditions that cause visible run-off of irrigation water. Adequate rainfall following an application will negate the need for irrigation.

#### MIXING AND COMPATIBILITY

#### MIXING INSTRUCTIONS

**SPECTICLE 20WSP** is packaged in water soluble pouches. The water soluble packages should not be allowed to become wet prior to addition to the spray tank. Avoid rough handling of packs that may cause breakage. Reseal the container to protect any unused packs from moisture. Do not add WSP directly to micronutrient solutions or liquid fertilizer mixtures. Completely dissolve WSP into water prior to adding any liquid fertilizer or micronutrient.

**SPECTICLE 20WSP** should be added to the tank and agitated, prior to introduction of another pesticide. Depending on the temperature of the water and the degree of agitation, the packets should be dissolved within a few minutes after they are added to the water

Mix the amount of **SPECTICLE 20WSP** needed for immediate application needs. Settling can occur if the spray mixture is allowed to sit over an extended period of time. Re-agitate the spray solution before application.

#### **COMPATIBILITY TESTING WITH OTHER PESTICIDES**

**SPECTICLE 20WSP** is generally compatible with many pesticides and liquid fertilizers\*. A compatibility test should be conducted with any potential tank mix partner with **SPECTICLE 20WSP**. Using a clear container, conduct the test as described below:

- 1. Fill the container three-quarters full with water.
- Add the appropriate amount of SPECTICLE 20WSP\*\* and the tank mix partner in the following order: (a) SPECTICLE 20WSP, (b) dry flowable, (c) aqueous suspensions, (d) flowables, (e) liquids, (f) solutions and emulsifiable liquid concentrates, g) micronutrients and liquid fertilizers.
- Shake or stir after each addition to mix thoroughly.
- 4. After adding all ingredients, let the mixture stand for 15 minutes and look for separation, large flakes, precipitates, gels, and heavy oily film or other signs of incompatibility.
- 5. If the compatibility test shows signs of incompatibility, do not tank mix the product tested with SPECTICLE 20WSP.
- 6. If mixing with a liquid fertilizer or micronutrient, add **SPECTICLE 20WSP** to the tank first and make sure it is fully dissolved before adding the fertilizer.

\*Do not use SPECTICLE 20WSP packets in a tank mix combination with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic which is not soluble in water or solvents such as diesel oils, kerosene, gasoline, or alcohol.

\*\*Note that a labeled spray rate for SPECTICLE 20WSP should be used in any compatibility test. Dilute from a concentrated suspension, or sample from a properly diluted spray solution. Do not cut the water soluble packs open for any reason.

#### SPRAYER CLEANUP PROCEDURE

If any **SPECTICLE 20WSP** is left in the spray equipment and subsequently applied to a sensitive turf listed in the **Turf Tolerance** section of this label, it has the potential to cause injury. Before and after using **SPECTICLE 20WSP**, thoroughly clean all mixing and spray equipment, including tanks, pumps, lines, filters, screens, and nozzles with a good quality tank cleaner on an approved rinse pad. Proper PPE must be worn while cleaning.

- · Completely drain the spray and mixing tanks.
- Rinse the spray tank inside and outside including all lines and screens. A rotating cleaning nozzle may be beneficial to dislodge any product from the sides of the tank.
- · Fill the tank with water and cleaner
- Circulate solution to ensure that the pumps, valves, and all lines are flushed.
- · Remove and clean all filters, screens, and nozzles.
- Drain all cleaning solution and then rinse once more with clean water.
- · Visually inspect the filters, screens, and tank walls to ensure that no product remains.
- Dispose of rinsate in an approved way.

#### **DIRECTIONS FOR USE OF SPECTICLE 20WSP ON TURF**

#### **USE PRECAUTIONS FOR SPECTICLE 20WSP ON TURF**

- Do not apply to newly seeded turf. Established turf is defined as turf 1 year after seeding.
- Do not apply to turf that is showing signs of stress including winterkill, spring dead spot, transitioning ryegrass etc.
- Do not apply to golf course putting greens.

#### **TURF TOLERANCE**

**SPECTICLE 20WSP** can be used on the following turf types and their cultivars. Before making a large scale application to a cultivar not listed on this label, treat a small area of turf with **SPECTICLE 20WSP** to assess acceptable turf tolerance.

#### Warm season turfgrasses and their cultivars

- Bermudagrass (Cynodon dactylon) (and hybrids)-Baby, Common, Floatex, GN1, Tifsport, Tifton 10, Tifway 419, Princess, Vamont, Riviera, Yukon
- Zoysiagrass (Zoysia spp.)-Cavalier, Crowne, DeAnza, El Toro, Empire, GNZ, Jamar, Meyer, Palisades, Zenith, Zeon
- Centipedegrass\* (Eremochloa ophiuroides)- Tifblair
- St. Augustinegrass\* (Stenotaphrum secundatum)-Captiva, Floratam, Palmetto, Raleigh
- Seashore paspalum (Paspalum vaginatum)—Sea Isle Supreme, Sea Isle 1
- Buffalograss (Buchloe dactyloides)
- Bahiagrass (Paspalum notatum)

#### Maximum Single Application Rates for SPECTICLE 20WSP on Warm Season Grasses

Turf Type	Application Rate Ounces of Product per A
Bermudagrass	5
Zoysiagrass	. 5
Seashore paspalum	5
Buffalograss	5
Bahiagrass	5
St. Augustinegrass	2.5
Centipedegrass	2.5

<sup>\*</sup>Application of SPECTICLE 20WSP may temporarily inhibit the rooting of stolons of centipedegrass and St. Augustinegrass.

**SPECTICLE 20WSP** may cause unacceptable injury to some turf types. <u>Do not use</u> on the following turf types or on turf that is a mixture containing any of these grasses, unless thinning or removal is desired.

- Creeping bentgrass (Agrostis palustris)
- Colonial bentgrass (Agrostis capillaris)
- Annual bluegrass (Poa annua)
- Roughstalk bluegrass (Poa trivialis)
- Fine fescue (Festuca rubra)
- Turf type tall fescue (Festuca arundinaceae)
- Kikuyugrass (Pennisetum clandestinum)
- Perennial ryegrass (Lolium perenne)
- Annual ryegrass (Lolium multiflorum)
- Kentucky bluegrass (Poa pratensis)

## PRECAUTIONS FOR USE OF SPECTICLE 20WSP NEAR SENSITIVE GRASSES ON GREENS, TEES, FAIRWAYS, ROUGHS, AND RESIDENTIAL AND COMMERCIAL LAWNS

CAUTION: SPECTICLE 20WSP can cause turf injury and stand reduction to sensitive grasses listed in the Turf Tolerance section of this label.

- SPECTICLE 20WSP may affect sensitive grasses downslope from treated areas after excessive rainfall. To minimize off-target effects of SPECTICLE 20WSP on sensitive grasses, irrigate after application as directed in the IRRIGATION AND WATERING AFTER APPLICATION section of this label and follow the directions below for specific situations.
- Allow turf to dry before allowing foot traffic or equipment through treated areas near sensitive grasses.

#### PRECAUTIONS FOR BENTGRASS GREENS AND BERMUDAGRASS GREENS OVERSEEDED WITH COOL SEASON GRASSES

- For applications of SPECTICLE 20WSP adjacent to bentgrass greens and bermudagrass greens overseeded with Poa trivialis
  or other cool season grasses, follow the precautions above and provide an untreated buffer zone of at least 15 ft.
- Do not apply SPECTICLE 20WSP on slopes uphill and adjacent to bentgrass or bermudagrass greens overseeded with cool season grasses such as roughstalk bluegrass (Poa trivialis).

#### PRECAUTIONS FOR BERMUDAGRASS OVERSEEDED WITH RYEGRASS

• SPECTICLE 20WSP should not be used on annual and perennial ryegrass or on bermudagrass overseeded with ryegrass. Provide an untreated buffer zone of at least 15 ft between overseeded bermudagrass and treated areas.

#### PRECAUTIONS FOR USE NEXT TO OTHER SENSITIVE GRASSES

 SPECTICLE 20WSP may be applied in situations where warm season grasses such as bermudagrass are adjacent to sensitive grasses such as tall fescue. The applicator, however, must take care not to apply SPECTICLE 20WSP directly to sensitive grasses or injury may occur. Provide an untreated buffer zone of at least 15 ft between sensitive grasses and treated areas.

#### USE RATES, TIMINGS, AND MAXIMUM SEASONAL RATE FOR SPECTICLE 20WSP ON TURF

The desired rate of **SPECTICLE 20WSP** for each application and the interval between applications depends on the turfgrass being treated, the weeds to be controlled, and local conditions. **SPECTICLE 20WSP** may be applied at a rate of 2.5-5.0 oz per acre in a single application. Use higher rates within the rate range if weed pressure is expected to be high. The optimum single rate for each weed at a particular use site may be affected by previous practices, including history of herbicide use, mowing height, turf density, turf health etc.

Multiple applications of **SPECTICLE 20WSP** can be made in a calendar year to extend the length of control as well as to control weeds germinating over an extended period. Multiple applications should be made at least 4-8 weeks after the previous application.

#### General Use Rates for SPECTICLE 20WSP\*

Target Weed	Rate Range (oz product per acre) for SPECTICLE 20WSP**
Crabgrass	2.5-4.375
Goosegrass	3.75-5
Annual bluegrass	2.5-3.75
Broadleaf weeds	2.5-5
Annual sedge and kyllinga	3.75-5

\*Use higher use rates within the rate range for each target weed when a site has historically higher weed pressure. Also, use higher rates on fine textured soils and lower rates on medium and coarse textured soils.

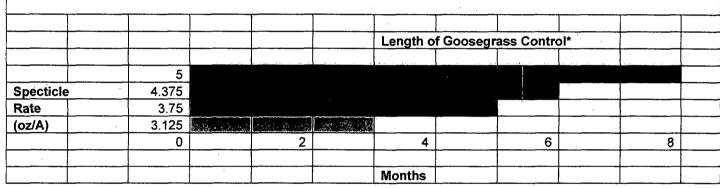
\*\*The maximum single application on turf is 5 oz per acre. For multiple applications, do not exceed 7.1 oz per acre in a 12 month period.

Length of Residual Control of Craborass with SPECTICLE 20WSP

				Length of Control*	rass				
	4.375		- 1				] ·-		
Specticle	3.75				1				
Rate	3.125				,				
(oz/A)	2.5								
	0	2		4		6		8	1
				Months					

\* The chart is a guideline. Length of residual control with a single application may vary depending on timing of application, weed pressure, soil conditions, and geography.

#### Length of Residual Control of Goosegrass with SPECTICLE 20WSP



• The chart is a guideline. Length of residual control with a single application may vary depending on timing of application, weed pressure, soil conditions, and geography.

#### **Annual Bluegrass Control**

Preemergence applications of **SPECTICLE 20WSP** should generally be made between August and December depending on the germination of annual bluegrass in each geographical zone. Post emergence control of late germinating annual bluegrass in tolerant turfgrasses may be achieved by combining **SPECTICLE 20WSP** with labeled use rates of **Revolver Herbicide**. The post emergence control of annual bluegrass provided by **REVOLVER Herbicide** allows **SPECTICLE 20WSP** to be applied over an extended period in the fall. The optimum timing is dependent on annual bluegrass germination and local conditions in a particular year.

Timing of Annual bluegrass control and rate of SPECTICLE20WSP alone and in combination with REVOLVER Herbicide (oz product per acre)

	August	September	October	November	December
Pre-Emergent Application	SPECTICLE 20WSP (2.5-3.75)	SPECTICLE 20WSP (2.5-3.75)	SPECTICLE 20WSP (2.5-3.75)	SPECTICLE 20WSP (3.75)	Not applicable
Pre and Post Emergent Application	Not applicable	SPECTICLE 20WSP (2.5) + Revolver (0.2-0.4)			

#### Tank Mix Combinations with SPECTICLE 20WSP on Turf

#### **Dormant, Non-Overseeded Turf**

Tank-mix combinations of SPECTICLE 20WSP plus a non-selective herbicide such as FINALE® will control existing undesirable vegetation in dormant warm season grasses such as bermudagrass and zoysiagrass. Applied as a broadcast spray, SPECTICLE 20WSP plus FINALE® will provide pre and postemergence control of susceptible species listed on the respective labels of the two herbicides.

SPECTICLE 20WSP may be applied in late winter at normal, regionally established timings for pre emergence herbicides, SPECTICLE 20WSP may be used alone or in combination with Ronstar FLO Herbicide, REVOLVER® or CELSIUS™ to provide broad spectrum residual weed control. Make applications at least 2 weeks prior to spring greenup. Follow use restrictions on all labels.

#### Non-Dormant, Non-Overseeded Turf

Tank-mix combinations of SPECTICLE 20WSP with a selective post emergent herbicide such as REVOLVER®, CELSIUS™, or SENCOR provide pre and post emergence control of weeds common to both products. Follow use restrictions on all labels.

#### RESISTANCE MANAGEMENT

SPECTICLE 20WSP controls weeds by inhibiting cellulose biosynthesis in plants. It is currently classified as a Group 21 herbicide. No known resistance to SPECTICLE 20WSP exists, and there are no known instances of cross resistance between SPECTICLE 20WSP and other classes of herbicides or other modes of action. Performance of SPECTICLE 20WSP is not affected by the presence of biotypes resistant to glyphosate, triazines, ALS inhibitors, growth regulators, or herbicides with other modes of action.

The use of herbicides with different modes of action in a tank mixture with SPECTICLE 20WSP, rotation with these herbicides, or application in conjunction with alternate cultural practices can help prevent the development and spread of resistant weed populations. If resistance to SPECTICLE 20WSP is suspected, contact Bayer Environmental Science to evaluate.

USE RATE		USE RATE	
OZ SPECTICLE 20WSP PER ACRE	AREA TREATED (ACRE)	OZ SPECTICLE 20WSP PER 1000 SQ FT	AREA TREATED (SQ FT)
2.5	0.25	0.0574	10,890
3.125	0.2	0.0718	8,712
3.75	0.17	0.086	7,405
4.375	0.14	0.1004	6,098
5	0.125	0.1147	5,445

USE RATE		USE RATE	
OZ SPECTICLE 20WSP PER ACRE	AREA TREATED (ACRE)	OZ SPECTICLE 20WSP PER 1000 SQ FT	AREA TREATED (SQ FT)
2.5	1	0.0574	43,560
3.125	0.8	0.0718	38,848
3.75	0.67	0.086	29,185
4.375	0.57	0.1004	24,829
5	0.5	0.1147	21,780

### Weeds Controlled or Suppressed by SPECTICLE 20WSP\*\*

Broadleaf Weeds	
American black nightshade	Solanum americanum
Bittercress	Cardamine sp.
Black medic*	Medicago lupulina
Buckweed, wild (seedlings only)	Polygonum convolvulus
California burclover	Medicago polymorpha
Canada thistle, Common (seedlings)	Circium arvense
Carpetweed	Mollugo verticillata
Chickweed, Common	Stellaria media
Chickweed, Mouse-ear	Cerastium vulgatum
Clover, White	Trifolium repens
Corn speedwell	Veronica arvensis
Cudweed, Linear-leaf/purple	Gnaphalium purpureum
Curly dock (seedlings)	Rumex crispus
Dandelion, cat's ear	Hypochoeris radicata
Dandelion, common (seedlings)	Taraxacum officinale
Doveweed	Murdannia nudiflora
Eclipta	Eclipta alba
Evening primrose, common	Oenothera biennis
Evening primrose, cutleaf	Oenothera laciniata
False chamomile*	Matricaria maritime
Filaree, redstem	Erodium cicutarium
Fleabane, blackleaved	Conyza bonariensis
Florida pusley	Richardia scabra
Gromwell, Yellow	Amsinckia calycina
Groundsel, common	Senecio vulgaris
Hairy fleabane	Erigeron bonariensis
Hairy nightshade	Solanum sarrachoides
Henbit	Lamium amplexicaule
Horseweed/ Marestail	Erigeron Canadensis
Kochia	Kochia scoparia
Lambsquarters, common	Chenopodium album
Lawn burweed	Soliva sessilis
Little mallow	Malva parviflora
London rocket*	Sisymbrium irio
Long-stalk phyllanthus	Phyllanthus tenellus
Mustard, black*	Brassica nigra
Mustard, wild	Sinapis arvensis
Panicle willowherb	Epilobium paniculatum
Pigweed, Prostrate	Amaranthus blitoides
Pigweed, redroot	Amaranthus retroflexus
Plantain, Buckhorn	Plantago lanceolata
Plantain, Paleseed	Plantago virginica
Prostrate knotweed	Polygonum aviculare
Prostrate spurge	Euphorbia maculate

Purslane, common	Portulaca oleracea
.Ragweed, Common*	Ambrosia artimisiifolia
Red tasselflower	Emilia sonchifolia
Redmaids	Calandrinia caulescens
Redstem fleabane/Storksbill	Erodium cicutarium
Sesbania, Hemp*	Sesbania exaltata
Shepherd's-purse	Capsella bursa-pastoris
Sida, Prickly/Teaweed*	Sida spinosa
Southern brassbuttons*	Cotula australis
Sowthistle, Annual	Sonchus oleraceus
Sunflower*, Common	Helianthus spp.
Swinecress	Coronopus didymus
Tropic ageratum	Ageratum conyzoides
Velvetleaf*	Abutilon theophrasti
Vetch, Purple*	Vicia benghalensis
Wild carrot*	Daucus carota
Woodsorrel, Yellow*	Oxalis stricta
Woodsorrel/Oxalis*	Oxalis sp

#### **GRASSES AND SEDGES**

Annual bluegrass/ 'Poa'	Poa annua
Barnyardgrass, common	Echinochloa crus-galli
Cheatgrass	Bromus secalinus
Crabgrass	Digitaria sp
Crabgrass, Henry	Digitaria ciliaris
Crabgrass, Large/Hairy	Digitaria sanguinalis
Crabgrass, Smooth	Digitaria ischaemum
Foxtail brome	Bromus rubens
Foxtail, Giant	Setaria faberi
Foxtail, Green	Setaria viridis
Foxtail, Yellow	Pennisetum glaucum
Goosegrass	Eleusine indica
Guineagrass	Panicum maximum
Kyllinga, Green	Kyllinga brevifolia
Mouse barley	Hordeum murinum
Nutsedge, Annual	Cyperus compressus
Nutsedge, Purple*	Cyperus rotundus
Nutsedge, Yellow*	Cyperus esculentus
Rice flatsedge	Cyperus iria
Ryegrass, Italian	Lolium multiflorum
Ryegrass, Perennial	Lolium perenne
Tufted lovegrass	Eragrostis pectinacea

<sup>\*</sup> Weeds suppressed by SPECTICLE 20WSP

<sup>\*\*</sup>Higher labeled rates should be used if weed pressure is historically high or longer residual control is desired (See General Use Rates for **SPECTICLE 20WSP** chart). The rate chosen should not exceed the tolerance for an individual turf type. Weed control can also be achieved with multiple applications of **SPECTICLE 20WSP**. Do not exceed a total of 7.1 oz/A per year with multiple applications.



#### Seeding, Overseeding, Re-Seeding, Sprigging and Sodding

Timing of seeding, re-seeding, overseeding, sprigging, and sodding turf relative to an application of **SPECTICLE 20WSP** needs to be tracked carefully. The herbicide can inhibit root development, as well as the emergence of seed. Newly emerged seedlings may be damaged and establishment of sod may be affected.

Do not apply SPECTICLE 20WSP to bermudagrass being used for sprigging or sodding on golf course greens or tees.

# Application of SPECTICLE 20WSP prior to overseeding bermudagrass with perennial ryegrass or reseeding into warm season turf

SPECTICLE 20WSP may be used to control weeds in bermudagrass prior to overseeding with a cool season grass or re-seeding seeded bermudagrass, provided that the interval between application and seeding is appropriate (See INTERVAL BETWEEN APPLICATION OF SPECTICLE 20WSP AND SEEDING OR OVERSEEDING table below. Overseeding and re-seeding intervals are affected by the rate of SPECTICLE 20WSP applied, rainfall, and soil type in a given year. Applications made sooner than the suggested intervals may decrease the establishment of the new seedlings and reduce turf coverage.

EVAL BETWEEN APPLICATION OF SPECTICLE 20WSP AND SEEDING OR OVERSEEDING		
RATE OF SPECTICLE 20 WSP (OZ/A)	MINIMUM OVERSEEDING INTERVAL	
2.5	8 months	
3.75	12 months	
4.375	12 months	
5	12 months	

#### WARM SEASON GRASSES ESTABLISHED WITH SPRIGS

**SPECTICLE 20WSP** may be used in a program to establish warm season turf with sprigs. Sprig into SPECTICLE 20 WSP treated turf no sooner than (2) months after application.

**SPECTICLE 20WSP** may be applied to sprigs of warm season grasses. The sprigs need to be well rooted prior to application. Apply the herbicide no sooner than four (4) months after sprigging to allow for good stand establishment. Prior to application, check rooting to make sure new roots are developing.

#### SODDING WARM SEASON GRASSES

Delay sodding into bareground or turf treated with SPECTICLE 20WSP until four (4) months after application. Sodding before (4) four months may inhibit stand establishment and reduce turf quality.

Sod needs to be actively growing/established at least (2) months prior to an application of **SPECTICLE 20WSP.** Prior to application, check rooting to make sure new roots are developing.

#### ORNAMENTALS, CHRISTMAS TREES, AND CONIFER PLANTATIONS

SPECTICLE 20WSP may be applied for pre emergent weed control in landscape ornamentals as well as field grown ornamentals in nurseries, Christmas trees, and conifer plantations. Apply SPECTICLE 20WSP as a directed spray, prior to weed seed germination to the soil surface around dormant or actively growing ornamentals as listed in the table below.

Applications may also be made to container-grown ornamentals provided that the ornamental is either a conifer or a dormant, deciduous plant and the diameter of the pot is at least 6 inches.

#### **ORNAMENTALS USES**

#### PRECAUTIONS FOR USE OF SPECTICLE 20WSP ON ORNAMENTALS

**SPECTICLE 20WSP** should be applied to established plants and not to transplants/liners/rooted cuttings/or seedling beds. Apply only around plants where the soil has firmly settled around the root area after irrigation or rainfall and where no surface cracks are evident to avoid root damage.

- Do not allow spray to contact foliage. SPECTICLE 20WSP may injury foliage, especially young leaf tissue. If the spray should contact the foliage, wash it off immediately.
- Do not use SPECTICLE 20WSP around bedding plants (annuals and herbaceous plants not specified on this label) or in areas where bedding plants may be planted for a minimum of 1 year after application of SPECTICLE 20WSP to a landscape bed.
- Do not use SPECTICLE 20WSP around bearing fruit and nut trees. Applications of SPECTICLE 20WSP may be
  made outside the dripline of bearing trees or vines in residential situations. Do not use SPECTICLE 20WSP
  around non bearing trees or vines unless they are at least 1 years old (citrus) and 3 years old (all others). Non
  bearing trees are defined as trees that will not bear fruit until at least 1 year after treatment.
- Do not mix SPECTICLE 20WSP into the soil. Cultivating or disturbing the soil surface after application may reduce weed control activity.
- Do not apply SPECTICLE 20WSP to heavily mulched landscape beds. For best results remove existing mulch and replace mulch after an application of SPECTICLE 20WSP.
- If transplanting into soil treated previously with SPECTICLE 20WSP within the last year, add new soil around roots to minimize
  effects on plant establishment.
- Do not use SPECTICLE 20WSP on plants grown in a greenhouse.
- Do not apply SPECTICLE 20WSP over-the-top of a deciduous ornamental at bud break or injury may occur.

**AMOUNT TO USE:** Apply **SPECTICLE 20WSP** as a broadcast, directed spray at 3.75 or 5 oz/acre (0.086 or 0.115 oz per 1000 sq ft) in 20-100 gallons of water per acre (0.5-2.5 gallons of water per 1000 sq ft) to ornamentals. Remove existing weed growth before application or use a post emergence herbicide. A subsequent application of **SPECTICLE 20WSP** can be made 3 or more months after the initial application provided that the maximum allowed rate in a 12 month period, 7.1 oz per acre, is not exceeded.

To activate **SPECTICLE 20WSP** for maximum herbicidal benefit, irrigate ornamentals treated with **SPECTICLE 20WSP** to move the herbicide into the soil. With dry soil, use a minimum of 0.125-0.25 inches of irrigation water, and with soil at or greater than field capacity, the amount of irrigation water should be reduced. In either case, do not create conditions that cause visible run-off of irrigation water. Adequate rainfall following an application will negate the need for irrigation.

#### COMBINATIONS OF SPECTICLE 20WSP WITH NON SELECTIVE HERBICIDES AROUND ORNAMENTALS

**SPECTICLE 20WSP** may be used in combination with a non selective herbicide such as **FINALE**<sup>®</sup>. Avoid contact of spray containing a non-selective herbicide with foliage, stems, green bark, or bare roots of turfgrasses, trees, shrubs, or other desirable vegetation, since severe damage may result. If spraying areas adjacent to desirable plants with a non-selective herbicide, use a shield while spraying to help prevent spray from contacting foliage of desirable plants.

#### **BACKPACK APPLICATION**

SPECTICLE 20WSP may be applied with backpack equipment. The chart below provides directions for a 4 gallon tank.

Oz Product per Acre	Oz Product per 1000 sq ft	Volume Product per Acre (gal)	Oz Product per 4 gallons	Number of 0.625 oz Packs per 4 gallons
3.75	0.086	24	0.625	1
5	0.115	32	0.625	1

#### LARGE TANK

The chart below provides directions for application of SPECTICLE 20WSP for a 100 gallon tank.

Spray volume gal/acre	Area treated	Product Rate oz/acre	Packs needed 0.625 oz	Packs needed 2.5 oz
100 gal	1 acre	3.7	2	1
100 gal	1 acre	5	0	2

#### ORNAMENTALS AND THEIR CULTIVARS TOLERANT TO SPECTICLE 20WSP

Common Name	Scientific Name	Cultivar
Abelia	Abelia grandiflora	Edward Gaucher
Arborvitae	Thuja sp.	Green Giant Nigra
Asparagus fern	Asparagus plumosus	·
Azalea	Rhododendron sp.	Girard's Rose Fashion VF 14 Golden Torch
Azalea, Encore	Rhododendron sp.	Autumn Debutante
Bluebird	Caryopteris x clandonensis	Dark Knight
Boxwood	Buxus microphylla	Green Beauty
Butterfly bush	Buddleia	Nanho Blue
Cape leadwort	Plumbago auriculata	
Cedar, Atlantic white	Chamaecyparis thyoides	
Cedar, Japanese	Cryptomeria japonica	Black Dragon Yoshino
Cotoneaster	Cotoneaster	Coral Beauty
Crape myrtle	Lagerstroemia indica	Sarah's favorite
Cypress, false	Chamaecyparis sp.	Gold Mops
Cypress, mediterranean	Cupressus sempervirens	
Daphne	Daphne caucasica	Summer Ice
Florida pipestem	Leucothoe populifolia	
Forsythia	Forsythia	Lynwood
Fragrant tea olive	Osmanthus fragrans	•
Gardenia	Gardenia 'Radicans'	Radicans
Gardenia Frostproof	Gardenia jasminoides	Frostproof
Gaura	Gaura lindheimeri	Pink Fountain
Holly, Chinese	llex cornuta	Needlepoint
Holly, Gallberry	llex glabra	Densa
Holly, Meservae	llex meservae	Blue Princess
Holly, Sky pencil	llex sp.	Sky Pencil
Indian hawthorn	Rhaphiolepsis indica	Pink Lady
Japanese cleyera	Ternstroemia gymnanthera	
Jasmine, Asiatic	Trachelospermum asiaticum	
Jasmine, Winter	Jasminum nudiflorum	

Common Name	Scientific Name	Cultivar
Juniper, Bar Harbour Juniper, Blue Pacific Juniper, Blue Rug Loropetalum	Juniperus horizontalis Juniperus confert Juniperus horizontalis Loropetalum chinensis	Bar Harbour Blue Pacific Blue Rug Burgundy Ruby
Maple, red Nandina sp Photinia	Acer rubrum Nandina Photinia x fraseri	Firepower Birmingham
Podocarpus Rose, Pink knockout Rose, Red knockout Rose, Virginia Snowberry, common	Podocarpus macrophyllus Rosa sp. Rose sp. Rosa virginiana Symphoricarpos albus	g
Spiraea Viburnum, Burkwood	Spiraea japonica Virbunum x burkwooddii	Lemon Princess
Viburnum, Popcorn Wax myrtle, Southern Weigelia, variegated	Viburnum plicatum Myrica cerifera Weigelia variegata	Popcorn

#### Herbaceous Perennials/Grasses Toleranct to SPECTICLE 20WSP:

Common Name	Scientific Name	Cultivar
Dahlia Day-lily	Dahlia sp. Hemerocallis sp.	Classic Elise Green Flutter Stella d'Oro
Iris Lantana Mealycup sage Muhlygrass Periwinkle Thin-fruit sedge	Iris siberica Lantana camara Salvia farinacea Muhlenbergia capillaris Vinca minor Carex flaccosperma	Snow Landmark Sunrise Rose Victoria White

**SPECTICLE 20 WSP** may be applied to shrubs and trees not listed on this label after treating a small number of such plants at the maximum rate. Treated plants should then be evaluated 1 to 2 months after application for possible injury and acceptable tolerance.

The growth stage of an ornamental may affect its tolerance to an application of **SPECTICLE 20WSP**. The following ornamentals at early growth stages may be damaged by **SPECTICLE 20WSP**. Apply **SPECTICLE 20WSP** only to mature growth stages of these ornamentals. Prior to using **SPECTICLE 20WSP**, treat a small number of plants at the proposed use rate and evaluate tolerance 1 to 2 months after application for possible injury and acceptable tolerance.

Common Name	Scientific Name	Cultivar
Andromeda	Pieris japonica	
Crape Myrtle	Lagerstroemia indica	Muskogee
Croton	Codiaeum variegatum	-
Southern wax myrtle	Myrica cerifera	
Spirea	Spiraea japonica	Anthony Waterer

The following cultivars may be injured by SPECTICLE 20 WSP at any growth stage. Do not use SPECTICLE 20WSP on any of these plants or their cultivars.

Scientific Name **Common Name** Festuca glauca Blue fescue grass Hydrangea Hydrangea macrophylla Lavender, Munstead Lavandula angustifolia Lilyturf Liriope sp.

Mint

Sage, Meadow

Mentha sp. Salvia nemorosa

Snowhill

Cultivar Elijah blue

Pia, Nikko Blue

#### Non-Selective Application to Non-Crop Areas

SPECTICLE 20WSP may be used for residual control of weeds in hardscapes, including but not limited to cart paths, patios, walkways, roadways, driveways, and parking lots. Applications are limited to spot applications only. Mix one 0.625 oz pack of Specticle 20WSP in 3.5 gallons of water. Apply with uniform coverage to target area at 20 gallons per acre, which is equivalent to 3.5 oz product per

Other non-crop areas include but are not limited to gravel areas, guardrails, utilities, railroads, other rights-of-ways and rocky/sandy areas in desert climates adjacent to golf courses and residential areas. Apply 5 to 7.1 oz product per acre.

SPECTICLE 20WSP may be used to maintain bare ground or for selective weed control in low maintenance turf. Weeds controlled are listed in the "Weeds Controlled" table. For difficult-to-control weeds or more extended control, use 7.1 oz of SPECTICLE 20WSP per acre. Do not exceed 7.1 oz per acre in a 12 month period.

If weeds are present at the time of application, tank mix a post emergence herbicide such as Finale with SPECTICLE 20WSP and apply to wet. Observe all use restrictions on this label and on the label of the tank mix partner. Use the more restrictive label language.

#### Forestry - Conifer and Hardwood Release

SPECTICLE 20WSP may be used for preemergent residual control of certain weeds in establishment of conifer and hardwood forests. Make a broadcast application of 3.5-7.1 oz /A of SPECTICLE 20WSP after transplanting when the soil has settled. Use 7.1 oz/A for longer residual control. The total of SPECTICLE 20WSP Herbicide applied in a 12 month period, however, must not exceed 7.1 oz/A. SPECTICLE 20WSP may be tank-mixed with other pre and post emergent herbicides for broader spectrum of control and for control of existing weeds provided that all restrictions for both products are observed.

#### IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

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Bayer Environmental Science A Business Group of Bayer CropScience, LP PO Box 12014 2 T.W. Alexander Drive Research Triangle Park, NC 27709

AA10717 20WSP Herbicide (PENDING) 07/22/08, Resubmitted 04/14/10, Resubmitted 06/15/10