

Spectro® 90 WDG

Turf and Ornamental Fungicide

For the prevention and control of fine turf diseases and diseases of annual and perennial flowers, bedding plants, foliage plants, ground covers, plus deciduous and evergreen trees and shrubs.

Active Ingredients:

Chlorothalonil (tetrachloroisophthalonitrile)	72%
Thiophanate-methyl (dimethyl 4,4-o-phenylenebis-(3, thioallophanate))	18%

Other Ingredients:	10%
Total:	100%

KEEP OUT OF REACH OF CHILDREN DANGER - PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.
See booklet label for additional precautionary statements and directions for use.

FIRST AID

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

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

If swallowed: Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If 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.

Note to physicians: Probable mucosal damage may contraindicate the use of gastric lavage. No specific antidote is available. All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred. Persons having temporary skin irritation may respond to treatment with antihistamines or steroid creams and/or systemic steroids.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

For 24-Hour Emergency Assistance Call Chemtrec 1-800-424-9300

EPA Reg. No. 1001-72

EPA Est. No.



NET CONTENTS:
5 Lbs.
(2.27 Kg)

MANUFACTURED FOR
Cleary Chemicals, LLC
11901 S. Austin Ave
Alsip, IL 60803



PRECAUTIONARY STATEMENTS

Hazards to humans and domestic animals.

Danger – Corrosive, causes irreversible eye damage. May be fatal if inhaled. Harmful if swallowed or absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes or on clothing. Do not breathe dust or spray mist. Wear goggles or face-shield when handling. Wear a respirator as specified below under Personal Protection Equipment (PPE). 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.

Note to User: This product may produce mild bronchial irritation and temporary irritation of the skin characterized by redness or rash on exposed skin areas. Affected persons should consult a physician.

Personal Protection Equipment (PPE)

Mixers, Loaders, Applicators and all other handlers must wear:

- Long sleeved shirt and long pants,
 - Shoes plus socks,
 - Protective eyewear (goggles or face shield)
- In addition, chemical-resistant gloves made of any waterproof material, such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, viton ≥ 14 mils must be worn by:

- (1) Mixers/loaders
- (2) Other handlers exposed to concentrate
- (3) Cleaners/repairers of equipment
- (4) Applicators using airblast equipment for golf course applications
- (5) Applicators using handheld equipment.

In addition, a NIOSH-approved TC-21 C Powered Air Purifying Respirator (PAPR) or a NIOSH-approved respirator with any N, R, P, or HE filter must be worn by:

- (1) Mixers/loaders
- (2) Others exposed to the concentrate
- (3) Applicators and other handlers in enclosed areas, such as a greenhouse.

User Safety Requirements

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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

This pesticide is toxic to aquatic invertebrates and wildlife. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water or rinsate.

This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly drained or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Read the entire label before using this product. Use strictly in accordance with label precautionary statements and directions and with applicable state and federal regulations. Do not apply this product in a way that will contact workers or other persons, or animals, 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 statements and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box **only** apply to uses of this product that are covered by the Worker Protection Standard.

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

Personal Protective Equipment (PPE) required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- coveralls
- chemical-resistant gloves made of any waterproof material.
- shoes plus socks
- protective eyewear

Special Eye Irritation Provisions: This product is a severe eye irritant. Although the restricted entry interval (REI) expires after 12 hours, for the next 6 ½ days entry is permitted only when the following safety measures are provided:

- 1) At least one container designed specifically for flushing eyes must be available in operating condition at the WPS required decontamination site intended for workers entering the treated area.
- 2) Workers must be informed, in a manner they can understand;
 - a) That residues in the treated area may be highly irritating to their eyes.
 - b) That they should take precautions, such as refraining from rubbing their eyes, to keep the residues out of their eyes.
 - c) That if they do get residues in their eyes, they should immediately flush their eyes using the eye flush container that is located at the decontamination site or using other readily available clean water.
 - d) How to operate the eye flush container.

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.

Do not enter or allow others to enter the treated area until sprays have dried.

PRODUCT INFORMATION

SPECTRO 90 WDG (hereafter referred to as SPECTRO) may be used for the prevention and control of fine turf diseases and diseases of annual and perennial flowers, bedding plants, foliage plants, ground covers, plus deciduous and evergreen trees and shrubs. SPECTRO can provide both curative and protective action. SPECTRO is useful on a wide variety of turf and ornamental disease problems. SPECTRO is for use only by certified applicators or those under their immediate supervision. Apply SPECTRO with ground or overhead equipment, using sufficient volume of spray to provide thorough coverage. Do not apply with fixed wing or rotary aircraft. Use the higher rates under conditions to severe disease pressure.

RESISTANCE MANAGEMENT

SPECTRO contains both a Group B1 and Group M5 fungicide/bactericide. Fungal isolates/bacterial strains with acquired resistance to Group B1 and/or Group M5 may eventually dominate the fungal/bacterial population if Group B1 and Group M5 fungicides/bactericides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of those species by SPECTRO and/or Group B1 and Group M5 fungicides/bactericides.

To delay fungicide resistance:

- Avoid the consecutive use of SPECTRO with other fungicides that have a similar target site of action, on the same pathogens.
- Use tank-mixtures or premixes with fungicides from different target sites of action Groups as long as the involved products are all registered for the same use and are both effective at the tank mix or prepack rate on the pathogen(s) of concern.
- Base fungicide use on a comprehensive IPM program.
- Monitor treated fungal populations for loss of field efficacy.
- Contact your local extension specialist, certified crop advisors, and/or manufacturer for fungicide resistance management and/or IPM recommendations for specific crops and resistant pathogens.

MIXING INSTRUCTIONS

Add required amount of SPECTRO to partially filled tank (3/4 volume), agitate by mechanical or hydraulic means while adding the remaining required amount of water. Maintain agitation to keep the material in proper suspension. For best results, use spray mixture the same day it is prepared.

TANK MIXING INSTRUCTIONS

- Consult the intended tank mix partner product label for appropriate application rates and use instructions.
- Follow the label directions for the most restrictive of label precautions and limitations.
- This product may not be mixed with any product containing a label prohibition against such mixing.
- Read and observe the most restrictive precautionary statements and other information appearing on product labels and mixtures.
- If tank mixing with other materials, add products in the following order: water soluble bags, water dispersible granules and extruded granules, dry flowables, wettable powders, liquid flowables, soluble materials such as fertilizers and emulsifiable concentrates.
- Do not tank mix with copper-containing materials or with highly alkaline pesticides such as Bordeaux mixture of lime sulfur.
- Do not combine SPECTRO with Dipel 4L, Foil, Triton Ag-98, Triton B-1956, Latron B-1956 or Latron AG-98 as phytotoxicity may result from the combination when applied to some species on this label.
- Do not combine SPECTRO with other pesticides, surfactants, or fertilizers, unless your prior use has shown the combination is physically compatible, effective, and non-injurious under your conditions of use.

TURF APPLICATIONS

For use on fine turf applications of cool season and warm season grasses (such as Bentgrasses, Bermudagrasses, Bluegrasses, Fescues, Ryegrasses, St. Augustine grasses, and Zoysia) or their mixtures, except where prohibited below. SPECTRO is not phytotoxic to any of the above mentioned grasses when used in accordance with the label. SPECTRO is to be used for the prevention and control of the diseases listed in Table 3. SPECTRO should always be used in conjunction with good turf management practices.

TURF USE RESTRICTIONS

- For use only by certified applicators or those under their immediate supervision.
- Do not use on home lawns and turf sites associated with apartment buildings, daycare centers, playgrounds, playfields, recreational park athletic fields, athletic fields located on or next to schools (i.e., elementary, middle and high school), campgrounds, churches, and theme parks, or on turf being grown for sale or commercial use as sod.
- Do not graze animals on treated turf or feed clippings to livestock or poultry.
- Apply after mowing or avoid mowing twelve hours after application.
- Do not mow or water after treatment until spray deposited on turfgrass is thoroughly dry (unless directed specifically by use directions).
- This product must not be applied within 150 ft (for air-blast) or 25 feet (for ground applications) of marine/estuarine water bodies unless there is an untreated buffer area of that width between the area to be treated and the body of water.

TURF USE DIRECTIONS

- Refer to Tables 1, 2 and 3 for specific rate and re-treatment interval instructions.
- Apply specified amounts in sufficient water to obtain thorough coverage (2-4 gallons per 1,000 square feet).
- For best results, use spray mixture the same day it is prepared. Spray uniformly over the area to be treated with a properly calibrated power sprayer.
- Begin applications when conditions favor disease development and repeat applications as long as these conditions persist.
- Use the highest specified rate and shortest application interval under conditions of severe disease pressure.
- When treating golf greens, always treat aprons and approaches.

Table 1: Maximum seasonal application rates. Do not exceed the following amounts.

Use Site	Lbs./Acre SPECTRO	Oz./1000 Sq. Ft. SPECTRO
Turf	36	13.2
Golf Course – Greens	101	37.25
Golf Course – Tees	72	26.50
Golf Course – Fairways - Except Florida	36	13.2
Golf Course – Fairways - Florida Only	15.1	5.56

Table 2: Single application rates and minimum re-treatment intervals. Do not exceed the maximum rates or reduce the re-treatment interval indicated below.

Use Site	Minimum Single Application Rates		Maximum Single Application Rates		Remarks
	Amount of SPECTRO	Minimum Re-Treatment Interval (days)	Amount of SPECTRO	Minimum Re-Treatment Interval (days)	
Golf course – Greens and Tees	10.1 lbs./Acre (3.72 oz./1000 sq. ft.)	7	15.7 lbs./Acre (5.76 oz./1000 sq. ft.)	14	
Golf course – Fairways, except Florida	10.1 lbs./Acre (3.72 oz./1000 sq. ft.)	7	15.7 lbs./Acre (5.76 oz./1000 sq. ft.)	14	One application only at max rate
Golf course Fairways, Florida only			15.1 lbs./Acre (5.56 oz./1000 sq. ft.)		One application only

Table 3: Turf Disease Control

Disease(s) Controlled	Minimum Single Application Rates		Maximum Single Application Rates		Remarks
	Oz./1000 Sq. Ft. SPECTRO	Minimum Re-Treatment Interval	Oz./1000 Sq. Ft. SPECTRO	Minimum Re-Treatment Interval	
Anthracnose (foliar and basal rot) <i>Colletotricum graminicola</i> (a)	3.0	7 days	5.76	14 days	One application only at maximum rate
Brown patch <i>Rhizoctonia solani</i> , <i>R. zeae</i> , <i>R. cerealis</i>					
Copper spot <i>Gloeocercospora sorghi</i>					
Dollar spot <i>Sclerotinia homeocarpa</i> , <i>Lanzia</i> or <i>Moellerodiscus</i> spp.					
Gray leaf spot <i>Pyricularia grisea</i> , <i>P. oryzae</i>					
Leaf spot, melt-out <i>Helminthosporium</i> spp., <i>Dreschlera</i> spp., <i>bipolaris</i> spp., <i>Curvularia</i> spp.					
Red thread, <i>Laetisaria fuciformis</i>					
Snow mold, gray <i>Typhula</i> spp. (b)					
Snow mold, pink <i>Fusarium nivale</i> , <i>Microdochium nivale</i> (b)	3.72				
Bluegrass stem rust					
Powdery mildew					
Downy mildew					
Fusarium blight					
Fusarium patch					
Dichondra leaf spot					
Bentgrass dead spot <i>Ophiosphaerella agrostis</i>					

Special Instructions:

- (a) Irrigate/syringe lightly (0.1 - 0.25 inches of water) after 8-12 hours. Take care not to move material below root zone of turf in treatment area.
- (b) Apply before turf has stopped all growth activity and before snow cover. If snow cover is intermittent or lacking, additional applications may be made at monthly intervals in areas of suspected or historic gray snow mold activity. In areas of predominantly pink snow mold, application should be made during the reproductive (fruiting) period of the pathogen for best results. Consult with your local extension service for this information.

Algae Control:

For the prevention of algal scum of turfgrasses caused by cyanobacteria of the genus *Lyngbia*. Only a preventative spray program with SPECTRO will prevent a recurrence of the algae when environmental conditions are favorable for algal growth.

For Prevention:

- If conditions for algal growth are favorable, apply SPECTRO at a rate of 2 – 3.72 ounces per 1000 square feet with a minimum re-treatment interval of 7 days.

For Treatment:

- If algae scum is well established, every attempt should be made to dry out the afflicted area.
- Once dry, spiking or verticutting should be done to enhance turfgrass recovery in conjunction with SPECTRO application at the application rate of 3.72 ounces per 1,000 square feet (10.1 lbs./Acre) with a 7 day re-treatment interval.
- Several applications of SPECTRO at this rate may be necessary for turfgrass recovery.
- Refer to Table 1 for maximum seasonal application rate.

HORTICULTURAL APPLICATIONS

Nursery, Greenhouse, Landscape, and Interiorscape

For use on annual and perennial flowers, bedding plants, foliage plants, ground covers, plus deciduous and evergreen trees and shrubs. SPECTRO is to be used for the prevention and control of the diseases listed in Tables 6, 7 and 8.

HORTICULTURE RESTRICTIONS

- Do not use mistblower or high pressure (greater than 400 psi) spray equipment when making applications in greenhouses.
- Do not use fruit, nuts or sap from treated trees for food or feed.

HORTICULTURE DIRECTIONS

- Refer to Table 4 and Table 5 rate and interval instructions for proper use.
- Apply SPECTRO at a rate of 1.0 to 2.0 pounds per 100 gallons of water unless other directions are given in the information below.
- For best results use spray mixture the same day it is prepared. Spray uniformly over the area to be treated with a properly calibrated power sprayer, apply as a full coverage spray to run-off when conditions are favorable for disease development.
- Use the highest specified rate and shortest application interval under conditions of severe disease pressure.
- Application should be made to plants when both foliage and flowers are dry, or nearly dry.

Table 4: Maximum seasonal application rates. Do not exceed the following amounts per acre.

Use Site	Lbs./Acre SPECTRO	Remarks
Ornamentals	50.6	Field Grown Only
Roses	50.6	Field Grown Only
Pachysandra	50.6	Field Grown Only
Conifers	22.9	

Table 5: Maximum individual application rates and minimum re-treatment intervals. Do not exceed the amounts per acre or reduce the re-treatment interval indicated below.

Use site	Lbs./Acre SPECTRO	Minimum Re-Treatment interval (days)	Remarks
Ornamentals	2.15	7	
Roses	1.53	7	
Pachysandra	4.31	7	
Conifers	5.7	21	
Conifers - Seed Beds	5.7	7	Seed Beds Only

Horticultural Disease Control

1. Leaf Spots/Foliar Blights

Actinopelte leaf spot
Alternaria leaf spot, leaf blight
Anthracnose
Ascochyta blight
Bipolaris (*Helminthosporium*) leaf spot
Black spot of rose
Blumeriella spp.
Botrytis leaf spot, leaf blight
Cephalosporium leaf spot
Cercospora leaf spot
Cercosporidium leaf spot
Coccomyces spp.
Colletotrichum leaf blotch, leaf spot, blights
Corynespora leaf spot
Coryneum blight, shothole
Curvularia leaf spot, tan leaf spot
Cylindrosporium leaf spot
Dactylaria leaf spot
Didymellina leaf spot
Diplodia spp.
Drechslera leaf spot, ink spot
Exobasidium leaf blister

Entomosporium (*Fabraea*) leaf spot
Fusarium leaf spot
Gloeosporium black leaf spot
Marssonina leaf spot
Monilinia blossom blight, twig blight
Mycosphaerella ray blight
Myrothecium leaf spot, brown rot
Nematostoma leaf blight
Phoma spp.
Phylloticta leaf spot
Physalospora spp.
Phytophthora aerial blight
Ramularia leaf spot
Rhizoctonia web blight
Schizothyrium spp.
Septoria leaf spot
Sphaeloma spp.
Sphaeropsis leaf spot
Stagonospora leaf scorch
Taphrina leaf blister
Volutella leaf blight

2. Flower Spots/Blights

Botrytis flower spot, flower blight
Curvularia flower spot
Monilinia blossom blight

Ovinia flower blight
Rhizopus blossom blight
Sclerotinia flower blight

3. Powdery Mildews

Erysiphe spp.
Microsphaera spp.
Phyllactinia spp.

Podosphaera spp.
Oidium spp.
Sphaerotheca spp.

4. Rusts

Gymnosporangium spp.
Puccinia spp.

Uromyces spp.

5. Scabs

Venturia spp.

6. Stem Rots/ Crown Rots

Bipolaris (*Helminthosporium*) spp.
Botrytis spp.
Cylindrocladium stem canker
Fusarium spp.
Gliocladium spp.

Myrothecium spp.
Ramularia spp.
Rhizoctonia spp.
Sclerotinia spp.

Ornamentals Suggested For Treatment

Note: The following listing of plants reflect the cumulative inputs from both historical field use and product testing programs. However, it is impossible to test this product on all species and cultivars. This list is provided as a general guide. A preliminary trial is suggested on a small scale before a full treatment is applied to any plant type not shown on this label, but found in a similar use site with a listed disease problem. Wait 5-7 days after treatment to evaluate trial results for possible phytotoxic responses. This product is not recommended for the following plants: Swedish Ivy (*Plectranthus australis*), Boston Fern (*Nephrolepis exaltata*), and Easter Cactus (*Hatiora gaertneri*).

Note: Numbers following plant names refer to disease categories listed above.

Trees and Shrubs

Andromeda (*Pieris*) - 1
Ash (*Fraxinus*) - 1, 3, 4, 6
Aspen (*Populus*) - 1, 3, 6
Azalea (*Rhododendron*) - 1, 2, 3, 6
Buckeye, Horsechestnut (*Aesculus*) - 1, 3, 4, 6
Cherry-Laurel (*Prunus*) - 1, 2, 3, 5, 6
Conifers - see Special Instructions below
Crabapple (*Malus*) - 1, 2, 3, 4, 5, 6
Cherry, Sand (*Prunus*) - 1, 2, 3, 5, 6
Dogwood (*Cornus*) - 1, 2, 3, 4, 5, 6
Eucalyptus - 1, 3, 6
Euonymus - 1, 3, 6
Firethorn (*Pyracantha*) - 1, 3, 5, 6
Hawthorn (*Crataegus*) - 1, 3, 4, 5, 6
Holly (*Ilex*) - 1, 2, 3, 6
Lilac (*Syringa*) - 1, 2, 3, 5, 6
Magnolia - 1, 3, 5, 6
Maple (*Acer*) - 1, 3, 5, 6

Ornamental Plants, Bulbs, and Ground Covers

Arabian Violet (*Exacum*) - 1, 2, 6
Aster - 1, 2, 3, 4, 6
Begonia - 1, 2, 3, 6
Bleeding heart (*Dicentra*) - 1, 6
Camellia - 1, 2, 6
Carnation (*Dianthus*) - 1, 2, 3, 4, 6
Chrysanthemum (*Dendranthemum*) - 1, 2, 3, 4, 6
Crocus - 6
Croton (*Codiaeum*) - 1, 6
Daffodil (*Narcissus*) - 1, 2, 6
Daisy (*Chrysanthemum*) - 1, 2, 3, 4, 6
Geranium (*Pelargonium*) - 1, 2, 3, 4, 6
Gerbera Daisy (*Gerbera*) - 1, 2, 3, 6
Gladiolus - 1, 2, 6
Flame violet (*Episcia*) - 1, 6
Gypsophila - 1, 2, 6
Hollyhock (*Alcea*) - 1, 3, 4, 6

Mountain Laurel (*Rhododendron*) - 1, 2, 3, 6
Norfolk Island Pine - see Special Instructions below
Oak (*Quercus*) - 1, 3, 6
Oregon-grape (*Mahonia*) - 1, 2, 3, 4, 6
Ornamental Almond (*Prunus*) - 1, 2, 3, 5, 6
Ornamental Cherry (*Prunus*) - 1, 2, 3, 5, 6
Ornamental Peach (*Prunus*) - 1, 2, 3, 5, 6
Ornamental Plum (*Prunus*) - 1, 2, 3, 5, 6
Ornamental Quince (*Chaenomeles*) - 1, 2, 3
Photinia - 1, 3, 4, 6
Poplar (*Populus*) - 1, 3, 6
Privet (*Ligustrum*) - 1, 3, 6
Rhododendron - 1, 2, 3, 6
Sequoia - 1, 6
Spirea (*Spiraea*) - 1, 3
Sycamore, Planetree (*Platanus*) - 1, 3, 6
Viburnum - 1, 2, 3, 4, 6
Walnut (*Juglans*) - 1, 3, 4, 6

Hydrangea (foliage) - 1, 2, 3, 5, 6
Impatiens - 1, 2, 4, 6
Iris - 1, 2, 4, 6
Lily (*Lilium*) - 1, 2, 4, 6
Marigold (*Tagetes*) - 1, 2, 4, 6
Narcissus - 1, 2, 6
Natal plum (*Carissa*) - 1, 3, 6
Pachysandra - 1, 6
Pansy (*Viola*) - 1, 2, 3, 4, 6
Petunia - 1, 2, 3, 4, 6
Phlox - 1, 2, 3, 4, 6
Poinsettia (*Euphorbia*) - 1, 2, 3, 4, 6
Rose (*Rosa*) - 1, 2, 3, 4, 6
Sansevieria - 1, 6
Statice (*Limonium*) - 1, 2, 4, 6
Tulip (*Tulipa*) - 1, 2, 6
Zinnia - 1, 2, 3, 5

Foliage Plants

Aechmea - 1, 6
Aglaonema - 1, 6
Aluminum Plant (*Pilea*) - 1, 6
Artemisia - 1, 3, 4, 6
Birdnest Fern (*Asplenium*) - 1, 6
Bougainvillea - 1, 6
Caladium - 1, 6
Christmas Cactus (*Schlumbergera*) - 1, 6
Dumbcane (*Diffenbachia*) - 1, 6
Dracaena - 1, 6
False Aralia (*Dizygotheca*) - 1, 6
Fatsia - 1, 6
Ficus - 1, 6
Fittonia - 1, 6
Florida Ruffie (*Vittaria*) - 1, 6
Hollyfern (*Polystichum*) - 1, 6
Hoya - 1, 6
Jade plant (*Crassula*) - 1, 3, 6
Leatherleaf Fern (*Acrostichum*) - 1

Lipstick plant (*Aeschynanthus*) - 1, 6
Ming aralia (*Polyscias*) - 1, 6
Oyster plant (*Tradescantia*) - 1, 4, 6
Pachysandra - 1, 6
Palms - 1, 6
Peacock plant (*Calathea, Kaempferia*) - 1, 2, 6
Peperomia - 1, 6
Philodendron - 1, 6
Piggyback Plant (*Tolmeia*) - 1, 3, 6
Pothos (Epipremnum) - 1, 6
Prayer plant (*Maranta*) - 1, 4, 6
Purple Passion Vine (*Gynura*) - 1, 6
Staghorn Fern (*Lycopodium*) - 1
Syngonium - 1, 4, 6
Ti (*Cordyline*) - 1, 6
Venus's Flytrap (*Dionaea*) - 1, 6
Yucca - 1, 3, 4, 6
Zebra plant (*Aphelandra*) - 1, 6

Note: Do not apply SPECTRO to either green or variegated Pittosporium or to Schefflera more than once, as multiple applications have been demonstrated to cause phytotoxic responses.

Special Instructions For Conifers

Diseases Controlled

Diplodia (*Sphaeropsis*)Tip blight (b)
Swiss needlecast (a)
Scleroderris canker (pines)(a)
Sirococcus tip blight(a)
Rhizosphaera needlecast (spruces)(a)
Scirrhia brown spot (pines)(a)
Cyclaneusma needlecasts(b)

Lophoderium needlecasts (b)
Rhabdoclone needlecast (b)
Botrytis seedling blight (c)
Phoma twig blight (c)
Phomopsis Twig Blight (b)
Kabatina Twig Blight (b)

- (a) Make first application is spring when new shoot growth is ½ to 2 inches in length. Make additional applications at 3-4 week intervals until conditions no longer favor disease development.
- (b) Apply at budbreak and repeat at 2-3 week intervals until needles are fully elongated and conditions no longer favor disease development.
- (c) Begin applications in nursery beds when seedlings are 4 inches tall and when cool, moist conditions favor disease development. Make additional applications at 7-14 day intervals as long as disease favorable conditions persist.

CHEMIGATION - Application through Irrigation Systems

Generic Requirements

1. Apply this product only through a sprinkler including center pivot, lateral move, end tow, side wheel roll, traveler, solid set, hand move, hand held or similar; flood (basin); or drip (trickle) irrigation system. Do not apply this product through any other type of irrigation system.
2. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
3. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
4. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
5. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Posting of areas to be chemigated is required when (1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care center, hospitals, in patient clinics, nursing homes or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or (2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements: Treated areas shall be posted with signs at all usual points of entry and long likely routes of approach from the listed sensitive area. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other locations affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters 2 ½ inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagon stop sign at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

Specific Requirements for Chemigation Systems Connected to Public Water Systems.

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone (RPZ), backflow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back towards the injection pump.
4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being drawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump or equivalent, effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

Specific Requirements for Sprinkler and Drip/Trickle Chemigation

1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow. (Only required for systems other than public water systems)
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally dosed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. (Only required for systems other than public water systems)
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. "Do not apply when wind speed favors drift beyond the area intended for treatment."

Specific Requirements for Flood (basin) Chemigation

1. Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops.
2. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
 - a. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
 - b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

- c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- f. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

APPLICATION INSTRUCTIONS

Hand Held Irrigation

1. Remove scale, pesticide residue, and other foreign matter from the chemical tank and entire injector system. Flush with clean water.
2. Determine the treatment rate as indicated in the directions for use for crop and pathogen and measure the intended areas of application.
3. Prepare a suspension of product in the mix tank or stock bucket. Fill the tank with 1/2 or 3/4 of the desired amount of water. Start agitation and add the required amount of product to the solution along with the remaining volume of water.
4. Maintain a gentle agitation in the mix tank during application to assure a uniform suspension.
5. Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute suspension per unit time. An injection ration of 1:100 is recommended for greenhouse systems.

APPLICATION INSTRUCTIONS FOR SPRINKLER - (OVERHEAD) IRRIGATION

Restrictions

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

Precautions

- Observe the requirements in the System Requirements section above.
- Apply SPECTRO only through systems containing anti-siphon and check valves designed to prevent water source contamination or overflow of the mix tank and containing interlocking controls between the metering device and the water pump to insure simultaneous shut-off.
- Maintain a gentle continuous agitation in mix tank during mixing and application to assure a uniform suspension. Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute suspension per unit time.
- Application of more than recommended quantities of irrigation water per acre may result in decreased product performance.
- When system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product cannot be flushed and must be dismantled and drained in a center pivot system, block the nozzle set nearest the well pivot injection unit to prevent spray being applied to this area.
- Where sprinkler distribution patterns do not overlap sufficiently, unacceptable disease control may result. Allow sufficient time for pesticides to be flushed through all lines and all nozzles before turning off irrigation water.
- SPECTRO may be applied in conjunction with chemically neutral liquid fertilizers. Application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, may cause a degradation of the pesticide, resulting in reduced performance and should be avoided.
- Check local restrictions and requirements regarding sprinkler irrigation applications, as they may vary from state to state.

Sprinkler (Overhead) Irrigation Equipment Preparation

- Before applying this product, clean the chemical tank and entire injector system to ensure no scale, pesticide residues, or other foreign matter from the previous operation remains in the equipment.
- Clean equipment according to the manufacturer's directions for the last product used before the equipment is used to apply this product.
- Flush with clean water.
- Application equipment should be clean and in good repair.

Sprinkler (Overhead) Irrigation Mixing Instructions

- Prepare a suspension of SPECTRO in a mix tank.
- Fill the tank with 1/2 to 3/4 of the desired amount of water.
- Start mechanical or hydraulic agitation.
- Slowly add the required amount of SPECTRO and then the remaining volume of water.
- Set sprinkler system to deliver 0.1 to 1.25 inches of water per acre. Volumes of water higher than this may reduce efficacy.
- Start sprinkler and then uniformly inject the suspension of SPECTRO into the irrigation water line so as to deliver the desired rate per acre. The suspension of SPECTRO should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing.

Storage and Disposal

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

Storage: Store in a cool, dry area in original unopened container. Store in a secured area unavailable to unauthorized persons.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide sprays or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental control Agency, or the Hazardous waste representative at the nearest EPA Regional Office for guidance.

Container Handling: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Completely empty bag into application equipment. Then dispose of empty in a sanitary landfill or by incineration or as allowed by State and local authorities by burning. If burned, stay out of smoke.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of the directions for use, the warranty disclaimers, or limitations of liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

RV070716[3]

Spectro is a registered trademark of Cleary Chemicals LLC.

All other trademarks are the property of their respective owners.