

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Reg # 10404-60

PM-22

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MAR 25 1993

Mr H. R. McLane  
Authorized Agent  
H. R. McLane  
7210 Red Road, Suite 206  
Miami, Florida 33143-5321

Subject: Label Amendment - Add Disease Control for Ornamental  
Plants

Lesco, Inc.  
Lesco Twosome Flowable Fungicide  
EPA Reg No 10404-60  
Your Submissions Dated December 27, 1991 and June 17, 1992

Dear Mr. McLane:

The Amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments below. A copy of the finished labeling must be submitted prior to releasing the product for shipment.

- (1) Use on ornamental plants must be incorporated into all appropriate sections of the label. For example, this use must appear on the front label and must be included in the General Information section.
- (2) Change your Notice section to describe this product as a fungicide; it is not an herbicide.
- (3) Under Comments 1) delete ";" between interval and during.

A stamped copy of the draft label is enclosed for your records.

Sincerely,

*Juel*

for Cynthia L. Giles-Parker  
Product Manager (22)  
Fungicide-Herbicide Branch

CONCURRENT REGISTRATION DIVISION (H7505C)

SYMBOL	Enclosure							
SURNAME	D. W. Wilson							
DATE								

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# Flowable Fungicide

Under the Federal Insecticide, Fungicide, and Rodenticide Act

Contains a combination of Chlorothaloxim and Fenarimol registered under EPA Reg. No.

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

Corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. May be fatal if inhaled. Do not breathe dust, vapor or spray mist. Wear goggles, face shield mask or pesticide respirator approved by MSHA or OSHA. Harmful if swallowed or absorbed through the skin. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

### Statement of Practical Treatment

**If In Eyes:** Hold eyes open and flush with steady, gentle stream of water for 15 minutes. **If Swallowed:** Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol. **If Inhaled:** Remove victim to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. Get medical attention. **If On Skin:** Wash with plenty of soap and water. Get medical attention.

### NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage. Persons having an allergic reaction respond to treatment with antihistamines or steroid creams and/or systemic steroids. **NOTE TO USER:** This product may produce temporary allergic side effects characterized by redness of the eyes, mild bronchial irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Persons having an allergic reaction should contact a physician.

### ENVIRONMENTAL HAZARDS

This product is toxic to fish, aquatic invertebrates and marine/estuarine organisms. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters. Do not apply when weather conditions favor drift from treated areas. Do not graze treated areas. Do not feed clippings to livestock.

## For Commercial Use Golf Courses, Parks Fields, Commercial Residential Turfgrass

**ACTIVE INGREDIENTS:**  
Chlorothaloxim: Tetrachloroisophtalimide  
Fenarimol: a-(2-chlorophenyl)-a-(2,4-dichlorophenyl)-5-pyridinylmethanone

**INERT INGREDIENTS:** . . . . .

Contains 4.17 lbs. Chlorothaloxim plus 0.17 lbs. Fenarimol

**KEEP OUT OF REACH OF CHILDREN  
DANGER**  
Read All Directions and Precautions

EPA Reg. No. 10404-60

#011092 1 Gallon

Manufactured by  
**LESCO, INC.**  
20005 Lake Road - P.O. Box 100  
Rocky River, OH 44152

**BEST AVAILABLE COPY**

Product Use Directions and Additional Precautionary Statements continued on Page 2.  
This is 04-22-91 EPA corrected version of 11-30-90 & 03-08-91 submitted copies.

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. STORAGE: Store in a cool place. Protect from excessive heat. Avoid freezing. PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate, is a violation of Federal law and may contaminate groundwater. 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 DISPOSAL: Do not reuse empty container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerate, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all directions before using. Not for Use in California.

**GENERAL INFORMATION**

TwoSome is a combination of chlorothalonil, a contact fungicide and Fenarimol a locally systemic fungicide, in a proven 16 to 1 ratio for the protection against fungal turfgrass diseases. Two different active ingredients team up for highly effective control of a broader spectrum of turfgrass plant diseases when used according to the directions on this product label.

CHEMIGATION: Do not apply this product through any type of irrigation system.

**MIXING INSTRUCTIONS**

Slowly invert container several times to assure uniform mixture. TwoSome should be added to the spray tank during the last half of the filling operation. Add the required amount of TwoSome to the spray tank while keeping the agitator running. Agitate thoroughly during the spraying operation to insure a uniform spray mixture. Use only a properly calibrated sprayer with nozzle screens and in-line strainers no finer than 50 mesh.

TwoSome in the spray tank with pesticides, surfactants, or fertilizers unless your prior use has shown the combination to be physically compatible, effective and noninjurious under your conditions of use. Do not mow or water after treatment until spray deposit on turfgrass is thoroughly dry.

NOTICE: LESCO INC. warrants that this herbicide conforms to the chemical description on its label. When used in accordance with label directions under normal conditions, this herbicide is reasonably fit for its intended purposes. Since timing, method of application, weather, plant and soil conditions, mixture with other chemicals, and other factors affecting the use of this product are beyond our control, no warranty is given concerning the use of this product contrary to label directions or under conditions which are abnormal or not reasonably foreseeable. The user assumes all risks of any such use.

**Comments for Chart; 1 thru 9**

- 1) Use the high rate and shorter interval; during conditions favoring heavy disease pressure.
- 2) Begin applications when conditions favor disease development and repeat applications as long as these conditions persist.
- 3) Applications to areas with visible disease symptoms should be made at the highest rate listed for that disease and continued at the shortest spray interval for that rate until the disease is brought under control. At this time the lower rate and the longer spray interval recommendations can begin.
- 4) Single application in September.
- 5) Application should be made within 30 day interval prior to snow cover or frozen soil.
- 6) If snow cover is intermittent or lacking, repeat applications every 3 to 4 weeks until disease conditions no longer prevail.
- 7) Make 3 to 5 applications at 14 day intervals.
- 8) Applications for necrotic ring spot, summer patch, fusarium blight, take all patch and spring dead spot should be applied to turfgrass and thoroughly irrigated with 1/2 to 1 inch of water.
- 9) Use the higher rate listed when the area to be treated has a previous history of disease infestation. (Consult Appendix to read Fl. Oz./1,000 sq. ft. rates to chart) (03-04-91)

Disease	Recommended Rates Fl. Oz. / 1,000 sq.ft.	Recommended Rates Gall./Acre	Spray Interval (Days)	Comments (See Left Panel)
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**EARLY SPRING PREVENTATIVE PROGRAM**

Leaf Spot ( <i>Helminthosporium Dreschleri</i> spp. <i>Pipolaris</i> spp.)	3.0 to 5.25	1.0 to 1.75	14 to 21	1
PATCH DISEASES Necrotic Ring Spot ( <i>Leptosphaeria korrae</i> ) Summer Patch ( <i>Magnaporthe poae</i> ) Fusarium Blight ( <i>Fusarium culmorum</i> ) ( <i>Fusarium poae</i> )	4.5 to 9.0	1.5 to 3.0	14	7, 8 & 9

**SUMMER PREVENTATIVE PROGRAM**

Dollar Spot ( <i>Sclerotinia homeocarpa</i> , or <i>Moellerodiscus</i> and <i>Lanzia</i> spp.)	3.0 to 4.5	1.0 to 1.5	14 to 21	1
Anthracnose ( <i>Colletotrichum graminicola</i> )	6.0 to 8.0	2.0 to 2.66	14 to 21	1
Rhizoctonia Blight/ Large Brown Patch ( <i>Rhizoctonia solani</i> )	3.0 to 6.0	1.0 to 2.0	7 to 10	1

**OTHER DISEASES OF TURFGRASS**

Gray Leaf Spot ( <i>Pyricularia grisea</i> )	3.0 to 9.0	1.0 to 3.0	7 to 10	1 & 2
Curvularia	3.0 to 8.0	1.0 to 3.0	7 to 10	1 & 2
Corticium Red Thread ( <i>Laetisaria luciformis</i> )	3.0 to 9.0	1.0 to 3.0	7 to 10	1 & 2
Copper Spot ( <i>Gloeosporium sorghi</i> )	3.0 to 9.0	1.0 to 2.0	10 to 21	1 & 3
Powder Mildew ( <i>Erysiphe graminis</i> )	8.0 to 16.0	2.66 to 5.33	30	1 & 3
Stem Rust of Bluegrass ( <i>Puccinia</i> spp.)	6.0 to 9.0	2.0 to 3.0	7 to 14	1 & 2
Spring Dead Spot ( <i>Leptosphaeria korrae</i> )	18.0	6.00	Single Application	4 & 8
Take-All Patch ( <i>Gaeumannomyces graminis</i> )	18.0	6.00	Two Applications	5 & 8

**WINTER DISEASES**

Fusarium Patch/Pink Snow Mold ( <i>Microdochium nivale</i> )	18.0	5.33	One or More Applications	5 & 6
Typhula Blight/Gray Snow Mold ( <i>Typhula incarnata</i> & <i>Typhula ishikariensis</i> )	18.0	5.33	One or More Applications	5 & 6

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Species and diseases cited below and repeat on a 7 to 14 days schedule until conditions are no longer favorable for disease development

**Broadleaf Shrubs and Trees**

Species	Diseases Controlled	Suggested First Application
Ash (Fraxinus)	Cercospora Cercosporidium, Cylindrosporium leaf spots	Spring bud break
Azalea,* Rhododendron*	Phytophthora die-back; Ovipennis flower blight	New leaf emergence; Early bloom
Buckeye, Horsechestnut	Leaf blotch, Anthracnose	Spring bud break
Cherry Laurel	Cercospora leaf spot	Petal fall
Creeppole	Scab, Cedar-apple rust, Sphaeropsis leaf spot, powdery mildew	Spring bud break
Crapemyrtle	Powdery mildew	
Dogwood	Septoria leaf spot	Early bloom
Euonymus	Anthracnose	Spring bud break
Fernox	Scab	Spring bud break
Flowering Almond, Orange, Sand Cherry	Marssonina blight/branch blight	Early bloom
Hawthorn	Rust, Filifera leaf spot	Pre-bloom
Holly	Rhizoctonia web blight	Warm, moist conditions
Mountain Laurel	Cercospora leaf spot	Spring bud break
Oak (red group only)	Taphrina blister, Actinopelt leaf spot, Anthracnose	Dormant buds/well
Oregon Grape (Mahonia)	Rust	Spring bud break
Photinia	Fabraea (Eriomsporium) leaf spot	Spring bud break
Pieris (Andromeda)	Phytophthora die-back	New leaf emergence
Poplar	Marssonina leaf spot	Spring bud break
Privet	Cercospora leaf spot	Prolonged wet conditions
Sycamore, Planetree	Anthracnose	Spring bud break
Viburnum	Powdery mildew	Mid-summer

**Bulbs and Flowering Plants**

Species	Diseases Controlled	Suggested First Application
Alyce	Powdery mildew	
Begonia	Powdery mildew	
Calceolaria	Powdery mildew	
Carnation	Alternaria leaf spot/branch rot; Botrytis flower blight	Transplant of cuttings; Cool moist conditions
Chrysanthemum/Daisy	Mycosphaerella ray blight, Septoria leaf spot; Botrytis flower blight (dry mists)	Transplant of cuttings; Pre bloom
Dahlia	Powdery mildew	

Species	Diseases Controlled	Suggested First Application
Delphinium	Powdery mildew	
Geranium	Botrytis blight, rust	Cool, moist conditions
Glaucolus	Curvularia leaf/flower spot, Botrytis leaf/flower spot	Early propagation
Hollyhock	Rust	Early seedling stage
Hydrangea* (foliage only)	Cercospora and Septoria leaf spots, Rust	Early propagation
Iris	Botrytis blossom blight, Didymella leaf spot	Cool, moist conditions
Lily, Crocus, Daffodil, Narcissus, Tulip	Botrytis gray mold, Stagonospora leaf scorch, ink spot	Pre-bloom
Petunia*	Phytophthora blight (foliar phase), Botrytis blight	Pre-bloom
Phlox	Powdery mildew	
Rose (use 1 1/2 pts. TwoSome per 100 gal. water)	Blackspot, Botrytis blight, powdery mildew	Spring bud break
Sweet Fern	Powdery mildew	
Statice	Anthracnose, Cercospora, Alternaria, Botrytis leaf blights	Spring bud break
Verbena	Powdery mildew	
Zinnia	Powdery mildew	First sign of disease

\* Discoloration of blooms has been noted on certain varieties when applications are made during flowering

**NOTE TO USER**

Applications of TwoSome at recommended rates may cause leaf puckering and other growth effects on the foliage of rose cuttings growing under cool, foggy, or overcast conditions. Plants growing under such conditions develop more slowly and are more sensitive to these growth effects. The rose cultivars "Royalty" and "Yee" have exhibited growth effects under these conditions while the same cultivars growing under sunny conditions have exhibited no such effects.

**Foliage Plants**

Species	Diseases Controlled	Suggested First Application
Dracena	Fusarium leaf spot	Pre-transplant
Pachysandra (use 4 pts. TwoSome per 100 gal. water)	Volvella leaf blight	Spring bud break
Leatherleaf fern	Aecochyia blight, Cercospora leaf spot, Cylindrocladum leaf spot, Rhizoctonia blight	Spring bud break
Parlor palm (Chamaedorea)	Bipolaris (Helminthosporium) leaf spot	Cool, moist conditions
Prayer plant (Maranta)	Helminthosporium leaf spot	Early propagation
Oyster plant (Rhoeo)	Tan leaf spot	Early propagation
Syngonium	Cephalosporium leaf spot	Warm, moist conditions
Philodendron	Phytophthora blight, Dactyaria leaf spot	Moist conditions

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TwoSome can be used in greenhouses. Applicators and attending personnel should wear protective clothing including long sleeves, gloves, goggles, or eye shield plus a face-filtering respirator specially designed to remove organic pesticide vapors and particles. DO NOT use mist blowers or high pressure spray equipment when making applications of TwoSome in greenhouses. Since different foliage and flowering plants are commonly grown in close proximity, unlabeled plants may inadvertently be sprayed when using TwoSome. The following foliage and flowering plants have been treated with TwoSome without phytotoxicity at labeled rates.

Botanical Name	Common Name	Botanical Name	Common Name
<i>Aechmea fasciata</i>	Aechmea	<i>Epipremnum aureum</i>	Golden Pothos, Schrdapsus
<i>Aeschynanthus</i> spp.	Lipstick Plant	<i>Eupasia cupreata</i>	Flame Violet
<i>Aphelandra squarrosa</i>	Zebra Plant	<i>Ficus benjamina</i>	Weeping Fig
<i>Aralia japonica</i>	Fatsia, Polyscias	<i>Fittonia</i> spp.	Silver-nerve Plant
<i>Araucaria heterophylla</i>	Norfolk Island Pine	<i>Gerbera jamesonii</i>	Gerbera Daisy
<i>Asplenium nidus</i>	Birdnest Fern	<i>Gynura sarmientosa</i>	Purple Passion Vine
<i>Bougainvillea</i> spp.	Bougainvillea	<i>Gypsophila paniculata</i>	Baby's Breath
<i>Caladium</i> spp.	Caladium	<i>Hoya</i> spp.	Wax Plant
<i>Calathea makoyana</i>	Peacock Plant	<i>Ilex cornuta</i>	Chinese Holly
<i>Callistephus chinensis</i>	Aster	<i>Ilex crenata</i>	Japanese Holly
<i>Carissa grandiflora</i>	Natal Plum	<i>Nephrolepis exaltata</i>	Boston Fern
<i>Chrysalidocarpus lutescens</i>	Areca Palm	<i>Pelargonium hortorum</i>	Geranium
<i>Clerodendron thomsoniae</i>	Bleeding Heart	<i>Peperomia obtusifolia</i>	Oval-leaf Peperomia
<i>Codiaeum</i> spp.	Croton	<i>Pilea caderei</i>	Aluminum Plant
<i>Cordyline terminalis</i>	Ti Plant	<i>Ptyocarpum</i> spp.	Staghorn Fern
<i>Crassula argentea</i>	Jade Plant	<i>Plectranthus thalictroides</i>	Lance Fleamole
<i>Cyrtanthium leucatum</i>	Holly Leaf Fern	<i>Polyscias</i> spp.	Aralia
<i>Dianthus</i> spp.	Carnation, Sweet William	<i>Sansevieria trifasciata</i>	Birdnest Sansevieria
<i>Dioscorea pinnata</i>	Dumbcane	"Hahnii"	
<i>Dioscorea maculata</i>	Dumbcane	<i>Tolmela manzoni</i>	Piggy-back Plant
<i>Dionaea muscipula</i>	Venus Fly Trap	<i>Yucca elephantipes</i>	Spineless Yucca
<i>Dryopteris filix-mas</i>	Falae Aralia	<i>Zyocactus truncatus</i>	Christmas Cactus

ACCEPTED  
with COMMENTS  
In EPA Letter Dated:

MAR 25 1993

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

10404-60

#### APPLICATION

Apply 2 to 4 pints TwoSome per acre (100 gals. of spray) For one gallon of water, add 1/3 to 1 1/4 oz. of TwoSome During periods of conditions favor severe disease development, generally cloudy or wet weather, use the higher rate specified and the shortest interval between applications.

Apply at budbreak and repeat 3 to 4 week intervals until needles are fully elongated and conditions no longer favor disease development. In plantations of mixed provenance, or when irregular budbreak occurs, apply weekly until all trees have broken bud, then every 3 to 4 weeks as specified above. In nursery beds, use the high rate on a 3-week schedule.

#### Conifers Diseases

Diseases Controlled	TwoSome Rate/Acre (100 gals. of Spray)	Application Directions
Sclerotinia Canker (pines), Swiss Needlecast	2 to 4 pts.	Make first application in spring when new shoot growth is 1/2 to 2 inches in length. Make additional applications at 3- to 4-week intervals until conditions no longer favor disease development. For use in nursery beds, apply the highest rate specified on a 3-week schedule.
Strobococcus Tip Blight Pinales Needle-cast (spruces), Sclerotinia brown spot (pines)	3 to 5 pts. 8 pts.	
Rhabdovirus Needle-cast (Douglas-fir)	2 to 4 pts.	Apply at budbreak and repeat at 3 to 4 week intervals until needles are fully elongated and conditions no longer favor disease development. In plantations of mixed provenance, or when irregular budbreak occurs, apply weekly until all trees have broken bud, then every 3 to 4 weeks as specified above. In nursery beds, use high rate on a 3-week schedule.
Cycloneusma and Lophodermium Needlecast (pines)	4 to 8 pts.	Apply in early spring prior to budbreak. Repeat applications at approximately 6- to 8-week intervals, until spore release ceases in late fall. Apply monthly during periods of frequent rainfall, and where Lophodermium infections occur during dormancy (Pacific Northwest). During drought periods, applications may be suspended, then resumed upon next occurrence of needle wetness.
Botrytis seedling blight, Fomes twig blight	2 to 4 pts.	Begin applications in nursery beds when seedlings are 4 inches tall and when cool, moist conditions favor disease development. Make additional applications at 7- to 14-day intervals as long as disease-favorable conditions persist.
Swiss Needlecast (Douglas-fir)	4 to 8 pts.	Single application technique: in Christmas tree plantations or forest stands, make one application in the Spring when new shoot growth is 1/2 to 2 inches in length.

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