



239-2522
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

PM 22 WASHINGTON, D.C. 20460

MAR 28 1996

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

The SOLARIS Group of Monsanto
P.O. Box 5006
San Ramon, CA 94583-0906

Attention: Dr. Francis Kamienski

Subject: Ortho Daconil 2787 Multipurpose Fungicide
EPA Reg. Number 239-2522
Your label amendments dated January 11, 1996

Dear Dr. Kamienski,

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable provided that you:

1. Align the decimals in the active ingredient statement, i.e.:

Chlorothalonil (tetrachloroisophthalonitrile)..... 29.6%
Inert Ingredients.....70.4%

2. Replace the ENVIRONMENTAL HAZARDS section of the label with the following language:

ENVIRONMENTAL HAZARDS: This product is toxic to fish and other aquatic organisms. Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters or rinsate. Do not apply when weather conditions favor drift of spray.

3. Submit one copy of your final printed labeling before you release the product for shipment.

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

In addition, we suggest that the statement "For residential outdoor use only." be added to the label in order to clarify the intended use of this product.

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If you have any questions about this letter, please contact
John Bazuin at 703-305-6117.

Sincerely yours,

Theresa A. Stowe

Theresa A. Stowe
Acting Team Leader (22)
Fungicide-Herbicide Branch
Registration Division (7505C)

BEST AVAILABLE COPY

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~~{/CON}~~OUTDOOR USE ONLY
~~{WATER DROPLET /CON}~~WATER BASED

ORTHO® DACONIL 2787® Multipurpose Fungicide
[ABN: ORTHO® Multi-Purpose Fungicide DACONIL 2787® Plant Disease Control]

Makes up to 64 Gallons Diluted Spray *[Pint size only]*
Makes up to 128 Gallons Diluted Spray *[Quart size only]*

CONTROLS DISEASES ON: LAWNS, SHRUBS, VEGETABLES, FRUIT TREES,
FLOWERS, AND SHADE TREES

CONTAINS DACONIL 2787® FUNGICIDE

CONTROLS DISEASES - Leaf Spots, Rust, Blights, Fruit Rots, Mildews, Scab,
Molds, etc. ON: Lawns, Vegetables, Fruit Trees, Flowers, Shrubs and Shade Trees.

Active Ingredient

Chlorothalonil (tetrachloroisophthalonitrile).....29.6%
Inert Ingredients.....70.4%

KEEP OUT OF REACH OF CHILDREN

WARNING

See back panel booklet for additional precautionary statements

NET CONTENTS 32 FL OZ (1 QT) 946 mL
16 FL OZ (1 PT) 473 mL

ACCEPTED
with COMMENTS
In EPA Letter Dated

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

239-2522

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[THE FOLLOWING COPY IS FOR A FIX-A-FORM BOOKLET TYPE LABELS WHICH CONSUMERS CAN OPEN, READ, AND RESEAL EASILY AT RETAIL AS WELL AS AT THE TIME OF USE]

For effective control of a broad spectrum of lawn, vegetable, fruit, and ornamental plant diseases. Controls: Leaf Spots, Rust, Blights, Fruit Rots, Mildews, Scab, Molds, etc. on Lawns, Vegetables, Fruit Trees, Flowers, Shrubs and Shade Trees.

Peel open for use directions and further information.

WARNING: Causes eye and skin irritation. This product may produce temporary allergic redness or rash on exposed skin areas. Do not get in eyes, on skin or on clothing. SEE ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS INSIDE BOOKLET.

PULL HERE TO OPEN LABEL PRESS TO RESEAL

Medical Information call 1-800-454-2333
Product Information call 1-800-225-2883

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SPRAY-ETTE® Trademarks of Monsanto Company
DACONIL 2787® Trademark of ISK Biotech Corp

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Manufactured for
The SOLARIS Group of
Monsanto Company
P.O. Box 5008
San Ramon CA 94583-0808
Product 1000
Form RS796-A
EPA Reg. No. 239-2522
EPA Est. 239-IA-3¹, 58996-MO-1^A
Superscript is first letter of lot number.
Made in USA

DIRECTIONS FOR USE

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

READ ENTIRE LABEL AND USE STRICTLY IN ACCORDANCE WITH LABEL PRECAUTIONARY STATEMENTS AND DIRECTIONS.

tsp = teaspoon

Tbs = Tablespoon

DIRECTIONS: Readily mixes with water and can be used in an ORTHO SPRAY-ETTE®, or tank-type sprayer.

Shake well before using. Fine spray required for proper coverage; use an ORTHO SPRAY-ETTE for best results.

[ILLUSTRATION - BROWN PATCH]

LAWN DISEASES

Place a small amount of water in sprayer, add fungicide, then add water to desired level and agitate gently to mix. Apply spray evenly. See below for rate and coverage. Apply after mowing. Withhold watering until spray has dried. Do not apply when temperature is above 90°F to prevent temporary discoloration of grass lawns. Do not graze treated areas or feed treated clippings to livestock animals.

Important: Proper identification of lawn disease is essential for control. Take a specimen of the disease to a professional garden center or contact the County Extension Service for positive identification before treatment.

GRASS LAWN DISEASES

CONDITIONS

Copper Spot (Gleocercospora)

70-80°F; low fertility

Curvularia Leaf Spot

Summer; 80-90°F; heavy thatch.

Dollar Spot (Sclerotinia)

70-80°F; low fertility

Gray Leaf Spot (Pyricularia)

Summer; high N; high humidity.

Gray Snow Mold (Typhula)

Late Autumn, Winter; 30-50°F; before snow covers lawn.

Helminthosporium Leaf Spot and melting out

Summer; 80-90°F; moist; overcast.

Large Brown Patch (Rhizoctonia)

Summer; 75-85°F; warming trend.

Red Thread (Corticium)

Cool wet; 55-72°F

Stem Rust of Bluegrass (Puccinia)

70-75°F; high light intensity; humidity.

Dichondra Diseases-(CA only)

Alternaria Leaf Spot

Winter & Spring; rainy; cool 55-72°F

Anthraco nose (Gleospodium)

Summer; 70-85°F

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AMOUNT TO USE			
Gallons of Spray Desired	To Cover Lawn Area (sq ft)	For Established Disease* Under Severe Conditions	For Light Diseases** Under Mild Conditions
2	333	4 fl oz (8 Tbs)	2 2/3 fl oz (5 1/3 Tbs)
4	667	8 fl oz (16 Tbs)	5 1/3 fl oz (10 2/3 Tbs)
6	1,000	12 fl oz (24 Tbs)	8 fl oz (16 Tbs)

*During periods of very wet or damp weather, make 3 successive applications at 7 day intervals. Continue treatments following rates for Light Disease Incidence and interval listed below.

**Apply at a 10 to 14 day interval depending on severity of disease and conditions favoring disease development until lawn has recovered.

**[ILLUSTRATION - EARLY BLIGHT]
VEGETABLE DISEASES**

Apply at listed rate per crop for disease to be controlled in one gal of water to cover 200 sq ft (10' x 20').

Repeat at 7 to 14 day intervals. Use the 7 day schedule during severe disease conditions or wet weather unless otherwise stated. Note: Avoid spraying plants during extremely hot and sunny weather. Do not apply to wilted plants. Do not graze treated areas or feed treated plant parts to livestock animals.

VEGETABLES-Numbers in () indicate days required between last application and harvest.

- Beans (Green) (7): Rust and Botrytis Blight (Gray Mold) (1 Tbs)-Begin applications during early bloom stage or when disease first threatens. Repeat at weekly intervals or as necessary.
- Broccoli (0), Brussels Sprouts (0), Cabbage (0), Cauliflower (0): Alternaria Leaf Spot and Downy Mildew (1 1/2 tsp). Begin after transplants are set in the field garden or when conditions favor disease development. Repeat at 7 to 10 day intervals.
Ring Spot in Brussels Sprouts (CA only) (2 tsp) Begin at time of early sprout development or when conditions favor disease development. Repeat at 7 to 10 day intervals.
- Carrots (0): Cercospora (Early) Blight and Alternaria (Late) Blight (2 tsp). Begin when disease threatens and repeat at 7 to 10 day intervals or as required to

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maintain control.

- Celery (7): Cercospora (Early) Blight and Septoria (Late) Blight (1 ½ tsp). Basal Stalk Rot and Pink Rot (Suppression) (1 Tbs). Begin when plants are set in the field garden. Repeat on a 3 to 5 day spray schedule for lower rate (1 ½ tsp) or a 7 day schedule for the higher rate (1 Tbs).
- Corn (Sweet) (14): Helminthosporium Leaf Blight and Rust (2 tsp). Begin when conditions favor disease development. Repeat at 4 to 7 day intervals or as needed. Do not apply to sweet corn for processing.
- Cucumbers (0), Melons (0), Pumpkins (0), Squash (0): Anthracnose, Downy Mildew and Target Spot (2 tsp); Scab, Gummy Stem Blight (Black Rot), Leaf Blight, Cercospora Leaf Spot, Powdery Mildew (except Southwestern states) (1 Tbs). Also suppresses Fruit Rot (Rhizoctonia) on cucumbers (1 Tbs). Begin when plants are in the first true leaf stage or when conditions are favorable for disease. Repeat applications at 7 day intervals or more frequently if required.
- Onion (Green) (14) and Dry Bulb (7), Leek (14), Shallot (14), Garlic (7): Botrytis Leaf Blight (Blast), Purple Blotch and Downy Mildew (Suppression) (1 Tbs). Apply at first sign of disease and repeat at 7 to 10 day intervals. Do not apply more than 3 times per season on green onions, leeks or shallots.
- Potato (0): Early Blight, Late Blight, Botrytis Vine Rot (1 ½ tsp). Begin when plants are 6 inches high or when disease threatens and continue at 7 to 10 day intervals or as needed to maintain disease control.
- Tomato (0): Early Blight, Late Blight, Gray Leaf Spot, Gray Leaf Mold, Septoria Leaf Spot, Anthracnose, Alternaria Fruit Rot or Black Mold, Rhizoctonia Fruit Rot, Botrytis Gray Mold (1Tbs). Begin when conditions favor disease development. Repeat at 7 to 10 day intervals or more frequently under severe conditions.

[ILLUSTRATION - SCAB]

FRUIT DISEASES

Spray to thoroughly cover tree canopy including undersides of leaves. For best results, use an ORTHO SPRAY-ETTE hose-end sprayer.

- Peach, Nectarine, Apricot, Cherry, Plum, Prune: Peach Leaf Curl; Coryneum Blight (Shothole) on Peach, Nectarine, Apricot: Mix 1 ½ fl oz (3 Tbs) in 4 gal of water (3 fl oz [6 Tbs] /8 gal water) and spray foliage to point of runoff. Make one application at leaf fall in late autumn. Make one or two additional applications in mid to late winter before buds begin to swell. Where Coryneum Blight (Shothole) occurs, apply an additional application one to two weeks after petal fall or at shucksplit (tiny fruit just beginning to form) to prevent fruit infections. Brown Rot Blossom Blight-Apply at same rates. Make one application at popcorn (pink, red or early white bud stage when first color shows) and a second application at full bloom. If cool, moist weather continues, make an additional application at petal fall. Cherry Leaf Spot on Cherries; Scab on Peach, Nectarines and Apricot-In addition to the bloom applications listed above, make one application at shucksplit. Do not apply ORTHO DACONIL 2787 Multipurpose Fungicide after shucksplit or before harvest. For control of Cherry Leaf Spot after harvest, make one application to foliage within 7 days after fruit is removed. In trees with a history of high leaf spot incidence, make a second application 10 to 14 days later.

- Papaya: Alternaria Fruit Spot, Anthracnose and Stem End Rot: Apply full coverage spray including fruit at the rate of 1 fl oz (2 Tbs) /4 gal water. Begin treatment when fruit spots appear (April to July) and continue treatments at 14 day intervals until dry weather conditions return.
- Passion Fruit (Hawaii only): Alternaria Fruit and Leaf Spot (Passion Fruit Brown Spot)-Apply full coverage spray, including fruit, at the rate of 1/2 fl oz (1 Tbs) /4 gal water. Begin treatment before spots appear on fruit (April to July) and continue treatments at 14 day intervals until dry weather conditions return.

(ILLUSTRATION - AZALEA PETAL BLIGHT)

ORNAMENTAL DISEASES

Mix 2 ¼ tsp/gal or 3 Tbs (1 ½ fl oz) /4 gal of water and spray foliage to point of runoff unless other directions are given in the table below. Begin applications as directed for each species and disease condition cited and repeat on a 7 to 14 day schedule until conditions are no longer favorable for disease development. During periods when conditions favor severe disease incidence, generally cloudy or wet weather, use the shorter interval between applications. For outdoor use only.

Species	Ornamental Diseases Controlled	Suggested First Applications
BROADLEAF SHRUBS AND TREES		
Ash (Fraxinus)	Cercospora, Cercosporidium, Cylindrosporium Leaf Spots	Spring bud break
Azalea,* Rhododendron*	Phytophthora Die-back; Ovulinia Flower Blight	New leaf emergence; Early bloom
Buckeye, Horsechestnut	Leaf Blotch, Anthracnose	Spring bud break
Cherry-Laurel	Cercospora Leaf Spot	Petal fall
Crabapple	Scab, Cedar-apple Rust Sphaeropsis Leaf Spot	Spring bud break
Dogwood	Anthracnose (Discula sp.) Septoria Leaf Spot	Spring bud swell Early bloom
Euonymus	Anthracnose	Spring bud break
Firethorn (Pyracantha)	Scab	Spring bud break
Flowering Almond, Quince and Cherry Hawthorn	Monilinia Blossom/ Branch Blight Rust, Fabraea Leaf Spot	Early bloom Pre-bloom
Holly	Rhizoctonia Web Blight	Warm, moist conditions
Mountain Laurel	Cercospora Leaf Spot	Spring bud break
Oak (red group only)	Taphrina Blister, Actinopelte Leaf Spot, Anthracnose	Dormant bud swell

Oregon-Grape (Mahonia)	Rust	Spring bud break
Photinia	Fabraea (Entomosporium) 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	Anthraxnose	Spring bud break
Viburnum	Powdery Mildew	Mid-summer

BULBS AND FLOWERING PLANTS

Carnation	Alternaria Leaf Spot/ Branch Rot, Botrytis	Transplant of cuttings; Cool, moist conditions
Chrysanthemum/ Daisy	Mycosphaerella Ray Blight, Septoria Leaf Spot	Transplant of cuttings
Geranium	Botrytis Flower Blight (Gray Mold), Rust	Pre-bloom Cool, moist conditions
Gladiolus	Curvularia Leaf/Flower Spot, Botrytis Leaf/Flower Spot	Early propagation

Hollyhock	Rust	Early seedling stage
Hydranga* (foliage only)	Cercospora and Septoria Leaf Spots, Rust	Early propagation
Iris	Botrytis Blossom Blight, Didymellina Leaf Spot	Cool, moist conditions
Lily	Botrytis Gray Mold (foliar phase), Phytophthora Blight	Pre-bloom
Petunia*	Botrytis Gray Mold (foliar phase), Phytophthora Blight, Botrytis Blight	Pre-bloom

Rose-Use 1 ¼ fl oz (2 ½ Tbs) / 4 gal	Black Spot, Botrytis Blight	Spring bud break
Statice	Anthraxnose, Cercospora, Alternaria, Botrytis Leaf Blight	Spring bud break
Zinnia	Powdery Mildew	First sign of disease

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

FOLIAGE PLANTS

Dracaena	Fusarium Leaf Spot	Pre-transplant
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Pachysandra-Use 3.33 fl oz (6 2/3 Tbs) / 4 gal	Volutella Leaf Blight	Spring bud break
Leatherleaf fern	Ascochyta Blight, Cercospora Leaf Spot, Cylindrocladium Leaf Spot, Rhizoctonia Blight	Spring bud break
Parlor Palm (Chamaedorea)	Bipolaris Leaf Spot (Helminthosporium)	Cool, moist conditions
Prayer plant (Maranta)	Helminthosporium Leaf Spot	Early propagation
Oyster plant(Rhoeo)	Tan Leaf Spot	Early propagation
Philodendron	Phytophthora Blight Dactylaria Leaf Spot	Moist conditions
Syngonium	Cephalosporium Leaf Spot	Warm, moist conditions

CONIFER DISEASES

PINES, DOUGLAS FIR, SPRUCES-Scleroderris Canker (Pines), Swiss Needlecast, Rhabdocline and Needlecast (Douglas Fir): Mix 1 fl oz (2 Tbs) / 4 gal water and apply as full coverage spray to the point of runoff. Rhizosphaera Needlecast (Spruces), Scirrhia Brown Spot (Pine): Mix 6 fl oz (12 Tbs) / 4 gal water and apply as above. 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 dry conditions return.

Lophodermium Needlecast: Mix 1 fl oz (2 Tbs) / 4 gal water and apply full coverage spray to the point of runoff. North Central and Northeastern States: Begin applications in mid-July to early August before infection occurs. Make additional applications at 3 to 4 week intervals until dry conditions return.

Combination Sprays with Insecticides - on Ornamentals

ORTHO DACONIL 2787 Multipurpose Fungicide may be used together with the following insecticides on ornamentals (at the label rates for both products): ORTHO Liquid SEVIN® brand carbaryl insecticide, or ORTHO DIAZINON PLUS® Insect Spray, or ORTHO Malathion 50 PLUS® Insect Spray, or ORTHENE® Systemic Insect Control, or ISOTOX® Insect Killer Formula IV. Apply fungicide on a regular schedule to control disease and add insecticide only when insect control is desired. Do not apply more than three consecutive applications of combination sprays.

STORAGE AND DISPOSAL

STORAGE: Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Avoid contamination of feed and foodstuffs. Store in a cool, dry place, preferably in a locked storage area.

DISPOSAL: PRODUCT-Partially filled bottle may be disposed of by securely wrapping original container in several layers of newspaper and discard in trash.

CONTAINER-Do not reuse empty bottle. Rinse thoroughly before discarding in

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trash.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

WARNING: Causes eye and skin irritation. This product may produce temporary allergic side effects characterized by redness of the eyes, mild bronchial irritation and redness or rash on exposed skin areas. Do not get in eyes, on skin or on clothing. Wear long sleeve shirt, long pants, and rubber gloves while mixing and applying this product. Wash skin and hands thoroughly after using. Remove and wash contaminated clothing before reuse. [Child/Pet ICON] Keep children and pets off treated area until dry. **FIRST AID:** In case of eye contact, immediately flush eyes with fresh water for 15 minutes and see a doctor. In case of skin contact, wash skin with soap and water. Get medical attention if irritation persists. **Note to Physicians:** Emergency Information call 1-800-454-2333.

ENVIRONMENTAL HAZARDS: This product is toxic to fish and other aquatic organisms. Do not apply directly to water or dispose of wastes in water. Do not apply when weather conditions favor drift of spray. Do not contaminate water by cleaning of equipment or disposal of wastes.

NOTICE: Buyer assumes all responsibility for safety and use not in accordance with directions.

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San Ramon, CA 94583-0808
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Product 1000
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Superscript is first letter of lot number.
Made in USA