



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

DEC 04 1996

Mr. Francis Kamienski
Registration Specialist
The Solaris Group, A Division of the
Agricultural Group of Monsanto Company
P.O. Box 5006
San Roman, CA 94583

Dear Mr. Kamienski:

Subject: Orthene Systemic Insect Spray
EPA Reg. No. 239-2406
Labeling Submitted January 10, 1996

The labeling amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, As Amended (FIFRA), is acceptable, provided that you:

Submit one copy of your final printed label incorporating the following corrections before you release the product for shipment.

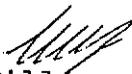
1. Qualify the front panel claim, "Destroys Entire Colonies" by adding the phrase "within 3 to 7 days" so that it reads as it was previously accepted for the product on November 6, 1987; i.e. "Destroys Entire Colonies Within 3 to 7 days."

2. The labeling submitted as the second page of the draft label which includes the ingredient statement and the "KEEP OUT OF REACH OF CHILDREN CAUTION" statements must appear on the front panel of the finished printed label.

If this condition is not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product bearing the amended label constitutes acceptance of this condition.

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

Sincerely,


William W. Jacobs, Ph. D.
Acting, Product Manager Team 14
Insecticide-Rodenticide Branch
Registration Division (7505C)



Recycled/Recyclable
Printed on paper that contains
at least 75% recycled fiber

2/11

Master Label - Includes Text for Various Sizes [1 lb, 12 oz; 1 lb, 4 oz; 1 lb, 8 oz; 1 oz; and 1/2 oz]

ACCEPTED with COMMENTS in EPA Letter Dated DEC 04 1996 Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 239-2406

ORTHO®
ORTHENE® Systemic Insect Spray
[ABN: Ant-Stop Orthene Fire Ant Killer]

[For one pound size package with dry treatment printed use instruction only] Treats up to 108 mounds.

[For one pound size package with dry and drench printed use instructions] Treats up to 108 mounds as a dry treatment.

NOTE: THIS PACKAGE IS SOLD BY WEIGHT. CONTENTS MAY HAVE SETTLED DURING SHIPMENT.

Premeasured Water Soluble Package
Contains Acephate

CONTROLS: Aphids, Armyworms, Bagworms, Budworms, Cankerworms, Cuban Laurel Thrips, Flower Thrips, Gypsy Moth, Lace Bugs, Leaf Beetles, Leafhoppers, Leaf Miners, Leafrollers, Leaf tiers, Loopers, Mealybugs, Pine Tip Moth, Sawflies, Spittlebugs, Scale (crawlers), Spider Mites, Tent Caterpillars, Webworms, Whitefly, and other listed leaf eating caterpillars and worms.

ON: Ornamentals, Trees, Shrubs and Flowers around the home.

- READY-TO-USE
- Treats up to 189 Fire Ant Mounds as a dry powder [1 lb, 12 oz size]
- Treats up to 135 Fire Ant Mounds as a dry powder [1 lb, 4 oz size]
- Treats up to 108 Fire Ant Mounds as a dry powder [1 lb size]
- Treats up to 54 Fire Ant Mounds as a dry powder [8 oz size]
- Treats up to 6 Fire Ant Mounds as a dry powder [1 oz size]
- Treats up to 3 Fire Ant Mounds as a dry powder [1/2 oz size]

Quick Kill of Fire Ants
Destroys Entire Colonies

1. Kills Imported Fire Ants Effectively.
2. Ready-to-use in home Lawns & Other Recreational Areas around the home.
3. Kills Fire Ant Workers Within Hours
4. NO NEED TO WATER IN.

3/11

Active Ingredient	By Wt.
Acephate (O,S-dimethyl acetylphosphoramidothioate)	75%
Inert Ingredients	25%

ORTHENE®, Acephate U.S. Pat. Nos. 3,716,600 & 3,914,417.

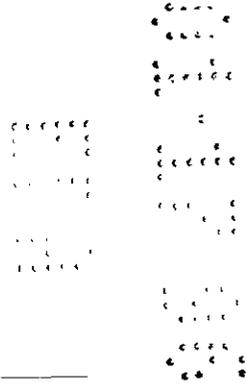
KEEP OUT OF REACH OF CHILDREN

CAUTION

See side panel for additional precautionary statements.

For home use only

NET WEIGHT _____



4/11

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

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

tsp = teaspoon
Tbs = Tablespoon

ORTHENE Systemic Insect Spray effectively controls many of the insects that attack trees, shrubs and flowers around the home. ORTHENE Systemic Insect Spray controls insects on contact and remains effective for an extended period of time because it is systemically absorbed by plants.

DIRECTIONS

Mix thoroughly and spray entire plant covering both sides of foliage thoroughly. For specific directions refer to table below. May be applied with a teaspoon measure for dry powder or a sprinkling can as a drench for treating fire ant mounds. Use a hose-end sprayer (such as an ORTHO SPRAY-ETTE® 4 or an ORTHO All-Purpose Sprayer), tank-type or power sprayer for spraying home lawns and controlling other listed insects.

COMBINATION SPRAY WITH FUNGICIDE OR FERTILIZER ON ROSES

ORTHENE Systemic Insect Spray may be used together with ORTHO FUNGINEX® Rose Disease Control, or ORTHOCIDE (captan) Garden Fungicide, or ORTHO Rose & Flower Food 8-12-4 (liquid) at the rates recommended on each product label. Apply fungicides on a regular schedule for disease control; add ORTHENE Systemic Insect Spray only when necessary for insect control. Do not apply more than two consecutive applications of ORTHENE Systemic Insect Spray in combination with any of the above fungicides.

Rate to Apply: Apply 1 packet (1½ level Tbs or 9 grams) to 3 gals water. Spray as aphids appear. Repeat if reinfestation occurs.

Pest	Plants
Aphids	Rose, Aster, Azalea, Calendula, Carnation, Chrysanthemum, Impatiens, Pansy, Snapdragon, Boxwood, Euonymus, Hibiscus, Pyracantha, Spirea, Arborvitae, Ash, Beech, Birch, Flowering Plum, Flowering Quince, Linden, Oak, Ornamental Pear, Sycamore, Viburnum, Willow, Flowering Almond, Fir, Ivy, Photinia, Maple, Periwinkle, Pittosporum

Rate to Apply: Apply 1 packet (1½ level Tbs or 9 grams) to 2 gals water. Spray when insects are present or feeding injury is first noticed. Repeat if reinfestation occurs.

Armyworms (Southern, Fall, Beet, Yellow-Striped)	Crapemyrtle, Chinese Elm, Aster, Calendula, Rose, Petunia, Dahlia, Snapdragon
Bagworm	Arborvitae, Cedar, Juniper, Cypress, Pine, Maple, Sycamore, Locust, Boxelder, Linden, Willow
Budworms (Tobacco and Calendula)	Geranium, Ageratum, Snapdragon, Calendula
Cankerworms (Spring and Fall)	Maple, Oak, Linden, Birch, Hickory Beech, Hawthorn, Cockspur Thorn, Silver Maple
Cuban Laurel Thrips	Cuban Laurel (Ficus)
Fall Webworm	Ash, Alder, Boxelder, Birch, Hickory, Linden, Poplar, Sycamore, Oak, Willow, Eastern Redbud
Gladiolus Thrips	Gladiolus
Gypsy Moth	Birch, Hawthorn, Oak, Poplar, Willow, Black Gum, Hickory, Maple, Sassafras, Hemlock, Cedar, Spruce, Pine
Honeylocust Pod Gall Midge	Honeylocust
Lace Bugs	Azalea, Pyracantha, Sycamore, Zinnia, Oak, Ash
Leafhopper (Potato)	Calendula, Dahlia
Leafbeetles (Elm, Willow)	Elm (Chinese or Siberian), Willow
Leafminers	Birch, Holly, Locust, Columbine, Spruce, Alder, Oak Yaupon, Zinnia
Leafrollers (Oblique-banded and Omnivorous)	Sycamore, Oak, Sweet Gum, Hickory, Boxelder, Locust, Holly, Staghorn Sumac, Flowering Cherry, Rose, Begonia, Oleander, Carnation
Leaftiers (Cherry Laurel, Sycamore and Sweet Gum)	Cherry Laurel, Sycamore, Sweet Gum
Loopers (Barberry, Omnivorous, Cabbage)	Mahonia, Gerbera, Chrysanthemum, Kalanchoe, Petunias, Ornamental Cabbage
Maple Shoot Moth	Maple
Mimosa Webworm	Mimosa, Honeylocust
Nantucket Pine Tip Moth	Pine

6/11

Obscure Root Weevil (Adults)	Rhododendrons, Azaleas, Viburnum, Roses Special Directions: Apply full coverage spray to the foliage in late spring, as soon as feeding damage is noticed (usually about May). Repeat every 4 weeks through September. (Mid-July through August are the peak feeding times.)
Plant Bug (Ash)	Ash
Planthopper (Viburnum)	Viburnum
Psyllids	Yaupon, Holly, Hackberry, Acacia, Laurel, Willow
Sawflies (Dusky Birch, Brownheaded Ash, Willow, Redheaded Pine, Pine, European Pine, Nesting Pine, Rose Stem)	Birch, Ash, Willow, Poplar, Pine, Rose
Spittlebug	Rose, Chrysanthemum, Juniper, Euryops
Tent Caterpillars (Eastern, Western and Forest)	Maple, Oak, Poplar, Ash, Birch, Hawthorn, Flowering Cherry, Black Cherry, Willow, Choke Cherry, Oak, Black Gum, Alder
Tentmaker (Poplar)	Poplar, Willow
Tussock Moth	Pine, Holly, Fir, Hickory, Maple, Beech, Ash, Birch, Poplar, Willow, Boxelder, Wild Cherry, Oak, Elm (Chinese or Siberian), Sycamore
Catalpa Sphinx Moth	Catalpa
Cypress Tip Moth	Juniper, Cypress
Juvenile Dusky Wing Moth	Oak
Pine Tube Moth	Pine
Saddled Prominent Moth	Rose, Beech, Maple, Oak, Poplar, Spirea
Sunflower Moth	Marigolds
Ash Hornworm	Ash
Rosy Maple Moth	Maple
Oleander Caterpillar	Oleander
Yellownecked Caterpillar	Oak, birch, Pyracantha, Beech, Hickory, Linden
Walnut Caterpillar	Hickory, Beech, Honeylocust, Sumac, Willow

Spiny Elm Caterpillar	Elm (Chinese), Poplar, Willow
Variable Oak Leaf Caterpillar	Oak, Birch, Hawthorn
Oak Webworm	Oak
Orangestriped Oakworm	Oak
Casebearers	Slippery Elm, Sycamore
California Oakworm	Oak
Redhumped Caterpillar	Birch, Flowering Plum, Locust, Poplar, Sweet Gum, Willow
Rose Midge	Rose

When to Use: Apply 1 packet (1½ Tbs or 9 grams) per 2 gals water. Spray 2 to 3 times about 7 to 10 days apart to control the following hard-to-kill pests. Additional sprays may be needed if plants become reinfested.

Pest	Plant
Flower Thrips	Rose, Daisy, Carnation, Gladiolus, Chrysanthemum, Snapdragon, Daylily, Alyssum, Aster, Dianthus, Celosia, Ageratum, Vinca, Zinnia, Hollyhock, Gardenia, Salvia, Petunia, Marigold, Calendula, Oleander
Mealybugs	Gardenia, Coleus, Yew (Taxus), Dieffenbachia, Croton, Azalea, Poinsettia, Oleander, Begonia, Gardenia, Camellia, Chrysanthemum, Ivy, Orchid, Fern
Whitefly	Gardenia, Poinsettia, Lantana, Azalea, Ageratum, Fuchsia, Gaillardia, Salvia, Zinnia, Privet, Camellia, Viburnum

For the following hard-to-control pests: Apply 1 packet (1½ Tbs or 9 grams) per 1½ gals water. Spray 2 to 3 times about 7 to 10 days apart. For best results apply at first sign of infestations. Additional sprays may be needed if plants become reinfested.

Pest	Plants
Scale (crawlers) (Japanese Wax, Tea, Cottony Cushion, Pine Tortoise, Hemlock, Pine Needle, Black Hemispherical, Kuno)	Holly, Euonymus, Azalea, Camellia, Gardenia, Elm, (Chinese), Bottlebrush, Dogwood, Chinese Holly, Orchid, Yaupon, Oak, Magnolia, Pine, Poinsettia, Rose, Willow, Boxwood, Chrysanthemum, Cypress, Hibiscus, Hackberry, Geranium, Sweet Gum, Hemlock, Fir, Croton, Palm, Shrimp Plant, Beech, Oleander, Laurel, Pyracantha
Twospotted Mites	Rose, Marigold, Daylily, Chrysanthemum, Dahlia, Phlox, Viburnum

Spider Mites	Holly, Yaupon, Pine, Juniper, Bottlebrush, Cypress, Arborvitae, Honeylocust, Fir, Hemlock, Spruce, Camellia, Azalea, Oak, Rose
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For the following hard-to-control pest: Apply 1 packet (1½ Tbs or 9 grams) per 2 gals water. Apply with ORTHO Lawn & Garden Sprayer, ORTHO SPRAY-ETTE or other suitable equipment. Thoroughly spray foliage and soil beneath plants. Begin applications in mid-June and make 3 more applications at 3-week intervals.

PEST	PLANTS
Black Vine Weevil	Azalea, Rhododendron, Yew (<i>Taxus</i> sp.)

Gives quick knockdown and kills fire ant workers within hours. Colonies are destroyed within 3 to 7 days. Fire ant workers track and powder deep into the mound where it also kills the queens, destroying the mound.

IMPORTED FIRE ANTS, Red Harvester Ants and Pavement Ants in home lawns and around ornamental plantings.

Dry Treatment:

Sprinkle 2 tsp dry powder over each mound. **NO NEED TO WATER IN.** Treat new mounds as they appear. For best results, apply when ants are active. Applications during prolonged hot or dry conditions may be less effective. Try not to disturb mounds while treating. Do not apply during a heavy dew or just before a rain. Repeat treatment if ants reappear.

Drench Treatment:

Mix 1 Tbs per 1 gal of water. Use a sprinkling can and gently apply one gal of solution over each mound. One pound will treat approximately 80 medium-sized mounds (1 to 2 ft in diameter).

Fall Armyworm, Leafhoppers, Sod Webworms, Greenbug, Mole Crickets on Home Lawns: Use a hose-end or tank-type sprayer.

Spray when insects are present or damage is first noticed. Apply 6 gals of spray per 1000 sq ft. Repeat if reinfestation occurs.

PEST	Tbs To Apply Per 2 gals of water	Tbs To Apply Per 6 gals of water
Greenbug, Fall Armyworm, Leafhoppers, Sod Webworms	1½ Tbs	4½ Tbs
Mole Crickets	3 Tbs	9 Tbs

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NOTE: Keep children and domestic animals off treated areas until these areas are completely dry. NOTE: Do not allow livestock to graze in treated areas. Do not feed treated grass to livestock.

Keep children and domestic animals off treated areas until these areas are completely dry.

NOTE: Apply this product only as specified on this label. Do not apply to American Elm, Flowering Crabapple, Sugar Maple and Cottonwood, as foliage injury may occur. Clean sprayer after use by flushing with water, do not use household bleach as a cleaning agent.

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. Do not store diluted spray.

DISPOSAL: PRODUCT - Partially filled canister may be disposed of by securely wrapping original container in several layers of newspaper and discard in trash. **CONTAINER** - Do not reuse canister. Discard canister in trash.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION: Harmful if swallowed. Causes eye irritation. Avoid contact with eyes, skin and clothing. Avoid breathing dust or spray mist. When handling this product, wear chemical resistant gloves, long pants, and long sleeved shirt. When using outdoors, spray with the wind to your back and do not use when wind speeds are 10 mph or more. Wash the outside of the gloves with soap and water before removing. Do not allow children or pets to come into contact with treated surfaces until sprays have dried.

FIRST AID: If swallowed, give a large amount of water to drink, make person vomit and call a doctor. In case of eye contact, wash eyes with fresh water for 15 minutes. If irritation continues, see a doctor. ~~Wash hands thoroughly after handling.~~

Note to Physicians: Emergency Information call 1-800-454-2333.

Acephate is a cholinesterase inhibitor. Atropine is antidotal. 2-PAM is also antidotal and may be used in conjunction with atropine but should not be used alone.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes. Cover or soil-incorporate spills.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting treatment area.

10/11

[.5 OZ AND 1 OZ SIZES ONLY]

Gives quick knockdown and kills fire ant workers within hours. Colonies are destroyed within 3 to 7 days. Fire ant workers track the powder deep into the mound where it also kills the queens, destroying the mound.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. **READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH LABEL PRECAUTIONARY STATEMENTS AND DIRECTIONS.**

tsp = teaspoon

IMPORTED FIRE ANTS, Red Harvester Ants and Pavement Ants in home lawns and around ornamental plantings. Sprinkle 2 tsp dry powder over each mound. **NO NEED TO WATER IN.** Treat new mounds as they appear. For best results, apply when ants are active. Applications during prolonged hot or dry conditions may be less effective. Try not to disturb mounds while treating. Do not apply during a heavy dew or just before a rain. Repeat treatment if ants reappear.

STORAGE AND DISPOSAL

STORAGE: Once this packet is open, use all of the product as directed. Do not attempt to reseal for future use. Store in a cool, dry place, preferably in a locked storage area.

DISPOSAL: PRODUCT - Empty or partially filled packet may be disposed of by securely wrapping original container in several layers of newspaper and discard in trash.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION: Harmful if swallowed. Causes eye irritation. Avoid contact with eyes, skin and clothing. Avoid breathing dust. When handling this product, wear chemical resistant gloves, long pants, and long sleeved shirt. Wash the outside of the gloves with soap and water before removing.

[child/dog icon] Do not allow children or pets to come into contact with treated surfaces.

FIRST AID: If swallowed, give a large amount of water to drink, make person vomit and call a doctor. In case of eye contact, wash eyes with fresh water for 15 minutes. If irritation continues, see a doctor. ~~Wash hands thoroughly after handling.~~ **Note to**

Physicians: Emergency Information call 1-800-454-2333. Acephate is a cholinesterase inhibitor. Atropine is antidotal. 2-PAM is also antidotal and may be used in conjunction with atropine but should not be used alone. **ENVIRONMENTAL HAZARDS:** This pesticide is toxic to birds. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes. Cover or soil-incorporate spills. This product is highly toxic to bees.

NOTE: This package is sold by weight. Contents may have settled during shipment.

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

[telephone icon] Medical Information call 1-800-454-2333

Product Information call 1-800-225-2883

11/11

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Manufactured for
The SOLARIS Group of
Monsanto Company
P.O. Box 5008
San Ramon, CA 94583-0808
Product 5153
Form RS8454-U
EPA Reg. No. 239-2406
EPA Est. 239-IA-3¹, 58996-MO-1^A, 33967-NJ-1
Superscript is first letter of lot number
Made in USA

