

# ORTHENE® Systemic Insect Spray

ACCEPTED  
APR 10 1979

# ORTHO

239-2406  
4-10-1979

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under 239-2406  
FPL Reg. No.

**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, Looper, 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  
**Active Ingredients** By Wt.  
\*Acephate (O,S-Dimethyl acetylphosphoramidothioate) 75%  
**Inert Ingredients** 25%  
\*U.S. Pat. No. 3,716,600

**CAUTION: KEEP OUT OF REACH OF CHILDREN.**

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH LABEL CAUTIONS AND DIRECTIONS.

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

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

Mix thoroughly and spray entire plant covering both sides of foliage thoroughly. For specific directions refer to table below. May be applied with an ORTHO SPRAY-ETTE, ORTHO Lawn & Garden Sprayer, tank type or power sprayer. Do not store diluted spray.

**COMBINATION SPRAY WITH FUNGICIDE OR FERTILIZER ON ROSES**  
ORTHENE Systemic Insect Spray may be used together with PHALTAN Rose & Garden Fungicide, or ORTHO FUNGINEX® Rose Disease Control, or ORTHO Rose Mildew Control, or ORTHOCIDE 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 Tablespoonfuls or 9 grams) to 3 gallons 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 Tablespoonfuls or 9 grams) to 2 gallons 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 Gall Midge	Honeylocust
Lace Bugs	Azalea, Pyracantha, Sycamore, Zinnia, Oak, Ash
Leafhopper (Potato)	Calendula, Dahlia
Leafbeetles (Elm, Willow)	Elm (Chinese or Siberian), Willow
Leaf Miners	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
Leaf Tiers (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
Obscure Root Weevil (Adults)	Rhododendrons, Azaleas, Viburnum, Roses <i>Special Directions:</i> 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

Jussock 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, Beach, 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
<b>When to Use:</b> Apply 1 packet (1½ Tablespoonfuls or 9 grams) per 2 gallons 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, Cosmos, 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
<b>For the following hard-to-control pests:</b> Apply 1 packet (1½ Tablespoonfuls or 9 grams) per 1½ gallons 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



**READ THE LABEL**

**CAUTION:** May cause eye irritation. May be harmful if swallowed. Do not breathe vapor or spray mist. Avoid contact with eyes, skin and clothing. In case of eye contact flush eyes with fresh water for at least 15 minutes. If irritation persists get medical attention. If swallowed, immediately drink a large amount of water and induce vomiting. Get medical attention. Remove and launder contaminated clothing before reuse.  
**Note to Physicians:** Emergency Information—call (415) 233-3737. This product contains a cholinesterase inhibitor. If signs and symptoms of cholinesterase inhibition are present, i.e., parasympathetic stimulation, atropine is antidotal. 2-PAM may also be given in conjunction with atropine.  
Do not contaminate food or foodstuffs.  
Keep out of any body of water. Do not contaminate water by cleaning of equipment or disposal of wastes.

**NET WEIGHT**

**Chevron Chemical Company**  
Ortho Division/San Francisco CA 94119  
Product 5153 Made in U.S.A.  
Richmond CA 94804  
R Form 8454-E  
EPA Reg. No. 239-2406-AA

**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**  
Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Do not reuse empty container. Wrap container and put in trash collection.  
**NOTICE:** Buyer assumes all responsibility for safety and use not in accordance with directions.

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