

Reg # 59639-26 . PM-14

ORTHENE 75 S Soluble Powder
EPA Reg. No. 59639-26
Submitted: May 4, 1990

1714

COPY A

Cranberry Blossom Worm
Gypsy Moth
False Armyworm

ACCEPTED

JUN 07 1990

Under the Federal Insecticide, Fungicide, and
Rodenticide Act, as amended, for the
pesticide registered under
EPA Reg. No. 59639-26



ORTHENE®

75 S

Soluble Powder

(INSECTICIDE)

KEEP OUT OF REACH OF CHILDREN
CAUTION
SEE BELOW FOR ADDITIONAL
PRECAUTIONARY STATEMENTS.

Active Ingredient
Acephate (O,S Dimethyl ester of
phosphorodithioic acid)
75%
Inert Ingredients
ORTHENE Acephate
U.S. Pat. No. 3,716,600

Br. Wt.
75%

Manufactured for
Valent U.S.A. Corporation, Inc.
Walnut Creek, CA 94596-0001
EPA Reg. No. & Product No. 552-100-0001
EPA Reg. No. 552-100-0001

ORTHENE KILLS FIRE ANTS

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION

Irritant if swallowed. Causes eye irritation. Avoid contact with eyes, skin and clothing. Avoid breathing dust or spray mist. Wash hands thoroughly after handling. Do not allow children or pets to come into contact with treated areas until sprays have dried.

STATEMENT OF PRACTICAL TREATMENT

If swallowed, drink 1 or 2 glasses of water for milk and induce vomiting by touching the back of the throat with finger. If possible, contact a physician, Poison Control Center or emergency center before inducing vomiting. Do not induce vomiting or give anything by mouth to an unconscious person. Take person and product container to the nearest emergency treatment center. In case of eye contact, wash eyes with fresh water for 15 minutes. If irritation continues, see a doctor. For skin contact, wash skin with plenty of soap and water. If inhaled, remove person from exposure area.

Note to Physicians: Emergency information: call 800 457 7022. Acephate is a cholinesterase inhibitor. If signs of cholinesterase inhibition appear, atropine is antidote. 2 PAM may also be used in conjunction with atropine but should not be used alone.

WORKER SAFETY

USE ONLY WHEN WEARING THE FOLLOWING PROTECTIVE CLOTHING AND EQUIPMENT DURING MIXING, LOADING, REPAIR AND CLEANING OF MIXING, LOADING AND APPLICATION EQUIPMENT AND DISPOSAL OF THE PESTICIDE. AND AREAS FOR WHICH A REENTRY INTERVAL HAS BEEN ESTABLISHED. EARLY REENTRY INTO TREATED AREAS: chemical-resistant gloves, long-sleeved shirt, long-legged pants, shoes, and socks. If overhead exposure is likely, such as during flagging, wear a hood or wide brimmed hat. **WORKER SAFETY:** Always wash hands, face and arms with soap and water before smoking, eating, drinking or touching. **AFTER WORK:** Before removing gloves, wash them with soap and water. Take off all work clothes and shoes. Shower using soap and water. Wear only clean clothes when leaving job. Do not wear contaminated clothing. Personal and protective clothing worn during work must be laundered separately from household articles. Store protective clothing separate from personal clothing. Clean or launder protective clothing after each use.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds. Applications may adversely affect birds in range and treatment areas. Do not apply directly to water or wetlands. Cover or incorporate to protect. Do not apply to blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

DIRECTIONS FOR USE

Read entire label use strictly in accordance with precautionary statements and directions and with applicable state and federal regulations.

REENTRY STATEMENT

Keep all unprotected persons out of operating areas until sprays have dried. Do not enter treated areas without protective clothing. Consult your state Department of Agriculture for reentry information.

Written or oral warnings regarding use of protective clothing and accidental exposure must be given to workers who are expected to be in treated areas or in areas about to be treated.

DIRECTIONS

Apply to cottonwoods only by sprayer, when systems. Do not apply by chemigation to any other crop or this crop using any other type of irrigation system.

ORTHENE 75 S Soluble Powder	
EPA Reg. No. 552-100-0001	

COTTON				
Crops	Insects	Amount ORTHENE 75 S Per Acre	Further Use Instructions	Days to Harvest
Cotton	Trips	2.0 to 3.0 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	21
	P. bugs	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Grasshopper	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Cotton Aphid	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Armyworm	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Cabbage looper	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Budworm	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Grasshopper	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Pink Bollworm	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	CA AZ	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
COTTON TANK MIXES				
Crops	Insects	Amount ORTHENE 75 S + LORELAN 40E Per Acre	Further Use Instructions	Days to Harvest
Cotton	Trips	2.0 to 3.0 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	21
	P. bugs	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Grasshopper	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Cotton Aphid	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Armyworm	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Cabbage looper	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Budworm	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Grasshopper	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Pink Bollworm	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	CA AZ	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	

COTTON TANK MIXES				
Crops	Insects	Amount ORTHENE 75 S + PYDRIN 24 EC Per Acre	Further Use Instructions	Days to Harvest
Cotton	Trips	2.0 to 3.0 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	21
	P. bugs	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Grasshopper	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Cotton Aphid	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Armyworm	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Cabbage looper	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Budworm	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Grasshopper	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	Pink Bollworm	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	
	CA AZ	1.0 to 1.5 lb	Apply in water at 10 to 25 gals per acre. Do not use in areas where there is a risk of injury to birds.	

BEST AVAILABLE COPY

Crops	Insects	Rate	Instructions	Notes
Cotton (Except CA, AZ)	Beet beet Buds	2.5 lb 2.25 lb or	Begin applications when eggs or insects appear and apply as needed to maintain control. Apply in 3 to 5 gals. of water with spray equipment or in 10 to 25 gals. of water with ground equipment. Do not feed gun trash to livestock or allow animals to graze treated areas. Do not apply more than two (2) lbs. active ingredient of PYDRIN to a crop in a growing season. All applicable directions, restrictions and precautions on the EPA registered label are to be followed.	21

COTTON SEED HOPPER ONE TREATMENT (EXCEPT AZ, CA AND THE BLACK LANDS OF TEXAS)

Crop	Insects	Amount DITHANE 75 S Soluble Powder Per Acre	Further Use Instructions
Cotton	Thrips Cotton Aphids Black (Gibber) Cuckoo	3 to 4 oz	Apply 3 to 4 oz. DITHANE 75 S Soluble Powder per acre in the planter box as a dry powder. Even coverage is required for acceptable insect control. To obtain even coverage, fill planter box 1/2 full of seed, add the proper amount of DITHANE 75 S Soluble Powder and mix thoroughly with a stick. Add the remainder of the seed to the planter box and the additional required amount of DITHANE 75 S Soluble Powder. If followed by thorough mixing. For improved mixing, combine seed with DITHANE 75 S Soluble Powder in a suitable container. Then pour treated seed into planter box. Loss of DITHANE 75 S Soluble Powder will occur if air planters are used. Plants grown from untreated seed will not exhibit insect control. Do not use treated seed for food or feed purposes or for seed for oil.

FIELD CROPS

Crops	Insects	Amount DITHANE 75 S Per Acre	Further Use Instructions	Days to Harvest
Peanut Soybean	A-late looper Cuckoo Aphids	1 to 1.5 lb	Apply in water at 5 to 10 gals. spray per acre by air or 20 to 50 gals. spray per acre by ground. Apply when eggs or insects first appear. Make one repeat application if necessary to maintain control. Do not apply more than 2 1/2 lbs. per acre per season.	14
Soybean	Grasshoppers St. Bush hopper Cabbage looper Green C. cucumber Vegetarian Caterpillar Bean leaf beetle Mexican bean beetle	1 to 1.5 lb	Apply in water at 7 to 10 gals. spray per acre by air or 10 to 50 gals. spray per acre by ground. Repeat as necessary to maintain control. Do not graze or cut vines for hay or forage.	14
Peanut	Silver Spotted St. bush (except CA)	1 lb	Apply in water at 10 to 50 gals. spray per acre by ground or in 5 to 10 gals. spray per acre by air.	14 (if digging)
Peanut	Stink bugs Armyworms Threecornered alfalfa hopper Corn Earworm	1 to 1.5 lb	Begin applications when insects first appear and repeat as needed to maintain control. Do not feed treated forage or hay to livestock or allow animals to graze treated areas.	14 (if digging)

FRUIT CROPS

Crops	Insects	Amount DITHANE 75 S Per Acre	Further Use Instructions	Days to Harvest
Cranberries	European Sawfly Sparrowhawk	1 to 1.5 lb	Apply in water by air, ground or with sprayers. Use a minimum of 2 gals. spray per acre by air. Use sufficient water to give thorough coverage with ground or sprayer equipment. Note: Limit to one application per growing season. Do not apply from start of bloom until all berries set.	14

SPRINKLER IRRIGATION APPLICATION TO CRANBERRIES

This product may only be applied through sprinkler irrigation systems including center pivot, lateral move, and row side furrow roll, travelers, big gun, sand bar, or hand move. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness or illegal pesticide residues in the crop may result from non-uniform distribution of treated water.

Have questions about calibration? you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the label prescribed safety devices for public water supplies are in place.

A person knowledgeable of the chemical system and responsible for its operation shall shut the system down and make necessary adjustments should the need arise.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriate located on the irrigation pressure to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, shut-off check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, shutoff operated valve located on the intake side of the injection pump and connected to the system interface to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional monitoring controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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.

Systems must be a metered pump, or a positive displacement meter pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system manifold.

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

Field Use Systems: Apply specified dosage for the entire length of the irrigation period or for a 30 to 60 minute period at the end of a regular irrigation set or at a 30 to 60 minute interval as a separate application not associated with a regular irrigation. Allow time for all water to flush the pesticide through all meters before turning off irrigation system to ensure the water is flushed and free of remaining pesticide. A dry indicator may be injected into the lines to mark the end of the application period. See NOTE.

Center Pivot Systems: Inject the specified dosage per acre continuously for one complete revolution of the system. See NOTE.

NOTE: Constant agitation must be maintained in the chemical supply tank during the entire period of insecticide application. Inject the product with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing.

Application of more than label recommended quantities of irrigation water per acre may result in decreased product performance by reducing the chemical concentration in the zone of effectiveness.

BEST AVAILABLE COPY

Plants	Insects	ORTINEE 75 S Per 100 Gall.	Time of Application	Recommended Application
Trees and Shrubs except Flowering Crab apple see below)	Aphids Bagworms Borer Leafminer Tent Caterpillar Lace Bugs Leafrollers	1 1/2 lb. 15.0 oz.	"As the insects begin to appear"	Apply the specified amount of ORTHINE 75 S Soluble Powder + 100 gals. water with a hydraulic sprayer. The addition of a suitable sticker improves control of Uredos Moth larvae
Douglas Fir Juniper Moth Larvae Gypsy Moth Larvae Webworms		2 1/2 lb. 105.0 oz.	"As the insects begin to appear"	*Must know application Adjust rates to 1 1/2 lbs. per 100 gals. water for Gypsy Moth control and 1 1/2 lb. per 100 gal. water for tent caterpillar control.
Scales ("Crawlers")		2 1/2 lb. 105.0 oz.	"As crawlers begin to appear Repeat applications at 2 week or more intervals may be necessary where there is continuous sapling production"	Do not apply to Huckleberry Bark of Great Cottonwood Lumberyard Pines and Vascular Subsumption
Trees and Shrubs	Panicle-tipped candle Miner	2 1/2 lb. 105.0 oz.	"Time of application is important Consult your Farm Advisor or County Extension Agent"	Apply the specified amount of ORTHINE 75 S Soluble Powder + 100 gals. water with a hydraulic sprayer as a full coverage spray
Graasshoppers		2 1/2 lb. 105.0 oz.	"As the grasshoppers begin to appear"	
California Tahoe Coniferworms Spring and Fall		1 1/2 to 2 1/2 lb. 15.0 to 105.0 oz.	"As the insects begin to appear Use the higher amount when the larger larvae are present"	Apply the specified amount of ORTHINE 75 S Soluble Powder + 100 gals. water with a hydraulic sprayer
Nantucket Fire Tip Moth Larvae		1 lb. 16.0 oz.	"Time of application is important Consult your Farm Advisor or County Extension Agent Repeat applications will be required for successive generations"	
Rust Weevil Adults		1 lb. 16.0 oz.	"Apply when first feeding damage occurs Repeat applications at four week intervals until the first heavy frost may be necessary for complete late age protection"	Apply the specified amount of ORTHINE 75 S Soluble Powder + 100 gals. water with a hydraulic sprayer as a full coverage spray
Bee Eater Beetle Spawners Subspawners Leafhoppers		1 lb. 16.0 oz.	"As the insects begin to appear"	Apply the specified amount of ORTHINE 75 S Soluble Powder + 100 gals. water with a hydraulic sprayer as a full coverage spray
Japanese Beetle		2 1/2 lb. 105.0 oz.	"As the Japanese Beetles begin to appear Repeat applications may be necessary"	
Tim Leaf Beetle Larvae		2 1/2 lb. 105.0 oz.	"As the Tim Leaf Beetles begin to appear ORTHINE 75 S will protect Tim Leaf Beetles from hatching"	Apply the specified amount of ORTHINE 75 S Soluble Powder + 100 gals. water with a hydraulic sprayer as a full coverage spray
Douglas Fir Christmas Trees	Douglas Fir Needle Widge	1 lb. 16.0 oz.	"Apply with caution by adding more than 2 weeks after bud set for additional pest control - Consult your County Extension Service"	Apply the specified amount of ORTHINE 75 S Soluble Powder + more than 100 gals. of spray per acre or 100 gals. of spray per cubic foot of ground
Flowering Crabapples	Aphids Tent Caterpillars Honeybees	1 lb. 16.0 oz.	"As the insects begin to appear"	Apply the specified amount of ORTHINE 75 S Soluble Powder + 100 gals. water with a hydraulic sprayer
				Do not apply more often than 3 times in a growing season or 4 weeks interval
				Cautions: Phytotoxicity has occurred on the following Crabapple varieties: Alaska Nivalis, Alaskan Paradise, Bismarck, Red Apple and Sweet Chisel

Cumtux Photocopying has
occurred on the following C&E
page numbers since January:
**Musculoskeletal Pain Prevention,
Red Wine and Snow Cloud**

COMMERCIAL TURFGRASS LAWNS AND OTHER RECREATIONAL TURFGRASS AREAS
DO NOT ALLOW LIVESTOCK TO GRAZE TREATED AREAS. DO NOT FEED TREATED GRASS TO LIVESTOCK.

Plants	Insects	Amount ORTHENE 75 S Per 1000 Sq. Ft.	Time of Application	Recommended Application
Turfgrass Asiatic Green & Common Carr	For Armyworm reared Striped Armyworm Southern Armyworm	1 to 1.2 oz. (1 to 1.3 lbs. per acre)	As the insects appear. Repeat application at 2 week intervals may be necessary.	Apply the specified amount of ORTHENE 75 S Soluble Powder per 1000 sq. ft. Use a minimum of 1 gal. water per 1000 sq. ft. to obtain good coverage.
	Cutworms	1.2 to 2.4 oz. (1.3 to 2.6 lbs. per acre)		
	Crunch Bugs	1.2 to 2.4 oz. (1.3 to 2.6 lbs. per acre)	Apply as needed for adult population knock down. 10 to 14 days.	Apply the specified amount of ORTHENE 75 S Soluble Powder per 1000 sq. ft. Use 1 to 1.5 gal. water per 1000 sq. ft. to obtain good coverage.
	Flies	2 to 2.4 oz.	Apply as needed for knockdown. 10 to 14 days. Only of existing adult population.	
	Soil Weevils (Curculionids)	1 to 1.2 oz. (1.3 to 1.4 lbs. per acre)	As the weevils begin to appear. Use the higher amount when knockdown is needed or when heavy infestations are present.	Apply the specified amount of ORTHENE 75 S Soluble Powder per 1000 sq. ft. Use 1 to 1.5 gal. water per 1000 sq. ft. to obtain good coverage.
	Leafhoppers	1 oz. (1.1 lbs. per acre)	As the leafhoppers begin to appear. A repeat application at 1 week intervals may be necessary.	Apply the specified amount of ORTHENE 75 S Soluble Powder per 1000 sq. ft. Use 1 to 1.5 gal. water per 1000 sq. ft. to obtain good coverage.
	Grasshoppers (Except CA)	1.0 to 1.8 oz. (1.1 to 2.0 lbs. per acre)	As the grasshoppers begin to appear. For knockdown of exist- ing populations, more than one application may be required throughout the grow- ing season. For heavy infestations, use the higher dosage rate.	Apply the specified amount of ORTHENE 75 S Soluble Powder per 1000 sq. ft. Use 1 to 1.5 gal. water per 1000 sq. ft. to obtain good coverage.
	Grasshoppers (Solitaries) Grasshoppers	1.0 to 1.8 oz. (1.1 to 2.0 lbs. per acre)	Apply when insects or their damage first appears. Repeat as necessary. Applica- tion is free to be re- peated at more than 1 week intervals.	Apply the specified amount of ORTHENE 75 S Soluble Powder per 1000 sq. ft. Use 1 to 1.5 gal. water per 1000 sq. ft. to obtain good coverage. Do not mow turfgrass for at least 24 hours after application.

Plants	Insects	Amount ORTHENE 75 S Per 1000 Sq. Ft.	Time of Application	Recommended Application
Turfgrass	Imported Fire Ants	1.0 to 1.2 oz. (1.1 to 1.3 lbs. per acre)	For best results apply the material in the early morning or late afternoon when the ants are most active.	Apply the specified amount of ORTHENE 75 S Soluble Powder as directed.
	Branch Borer	1.0 to 1.2 oz. (1.1 to 1.3 lbs. per acre)	Applications made under brood nest and dry conditions may be ineffective. Due to the location of the nest.	Grass in treated areas may be injured.
	Branch Borer	1.0 to 1.2 oz. (1.1 to 1.3 lbs. per acre)	Applications made under brood nest and dry conditions may be ineffective. Due to the location of the nest.	Do not treat brood nest more than once per season.

Plants	Insects	Amount ORTHENE 75 S Per 1000 Sq. Ft.	Time of Application	Recommended Application
Ornamentals	Cutworm Flea Beetle Southern Armyworm Striped Armyworm	1.0 to 1.2 oz. (1.1 to 1.3 lbs. per acre)	As the insects appear. Repeat at 2 week intervals as necessary.	Apply the specified amount of ORTHENE 75 S per 1000 sq. ft. Use a minimum of 1.5 gal. of water per 1000 sq. ft. to obtain good coverage.

OUTDOOR WASP AND PERMETER SPRAY

Plants	Insects	Amount ORTHENE 75 S Per Gallon	Time of Application	Recommended Application
Outdoor Wasp and Perimeter Area	Wasps	16 oz. (1.0 lbs.)	Treat early in the day as wasps are generally inactive during these times.	Apply specified amount of ORTHENE 75 S Soluble Powder per each gallon of water used. Apply as a spot treatment to the nest, nest entrance and surrounding areas where the wasps sight.
	Cockroaches Ants Flies Earwigs Beetles Termites	16 oz. (1.0 lbs.)	As the insects appear.	Apply specified amount of ORTHENE 75 S Soluble Powder per each gallon of water used.
				Apply to a band of soil 6 to 10 feet adjacent to the structure and to a height of 2 to 3 feet on the foundation where pests may be active or may be entering. Also apply as a treat- ment to areas of soil adjacent to sur- faces of buildings, window frames, shutters, doorways, screens, eaves, porches, garages, carports, around garbage areas and other areas where these pests congregate.

OUTDOOR FLORAL CROPS AND GROUND COVERS

Plants	Insects	Amount ORTHENE 75 S Per 100 Gals.	Time of Application	Recommended Application
Ornamentals Daisies Carnations Fuchsia Geranium Pinks Roses Sedum Sticks Syringa Tulips Zinnia	Aphids Thrips Leafhoppers	2.3 oz. (2.5 lbs.)	As insects begin to appear. Repeat applications may be necessary.	Apply the specified amount of ORTHENE 75 S in 100 gals. water with a hydraulic sprayer as a full coverage spray. Multiple applications may cause slight burn or marginal leaf necrosis on some varieties. Test on a few plants to determine varietal susceptibility.
Japanese Syringa	Japanese Weevil	1.3 lbs. (1.5 lbs.)	As the Japanese Weevil begins to appear. Repeat applications at 2 week intervals may be necessary.	

OUTDOOR FLORAL AND FOLIAGE PLANT CROPS

Plants	Insects	Amount ORTHENE 75 S Per 100 Gals.	Time of Application	Recommended Application
Ornamentals Daisies Carnations Fuchsia Geranium Pinks Roses Sedum Sticks Syringa Tulips Zinnia	Leafhoppers Thrips Aphids	2.3 oz. (2.5 lbs.)	As insects begin to appear. Use the higher amount when the crop is under stress.	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a hydraulic sprayer as a full coverage spray.
Japanese Syringa	Japanese Weevil	1.3 lbs. (1.5 lbs.)	As the Japanese Weevil begins to appear. Repeat applications at 2 week intervals may be necessary.	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a hydraulic sprayer as a full coverage spray. The addition of a wetting agent may be required on difficult to wet plants.
Japanese Syringa	Japanese Weevil	1.3 lbs. (1.5 lbs.)	As the Japanese Weevil begins to appear. Repeat applications at 2 week intervals may be necessary.	Common Phytomyza has not been reported on the following plants: Begonia, Camellia, Canna, Clematis, Crocus, Daffodil, Daylily, Gladiolus, Hyacinth, Iris, Larkspur, Lily, Marigold, Petunia, Pinks, Roses, Salvia, Tulips, Zinnia.

BEST AVAILABLE COPY

ORTHENE 75 S SOLUBLE POWDER INSTRUCTIONS FOR USE ON HOUSE PLANTS AND PALM PLANT CROPS

Plant	Insects	Amount ORTHENE 75 S Per 100 Gals.	Time of Application	Recommended Application
Roses	Leafrollers	2/3 to 1 lb (10.5 to 16 oz)	As leafrollers begin to appear. Use the higher amount when the large larvae are present.	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a hydraulic sprayer as a full coverage spray.
Foliage Plants Orchids Anthuriums Cacti Pansettia	Aphids	1.346 (15.2 oz)	As aphids begin to appear.	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a hydraulic sprayer as a full coverage spray. The addition of a wetting agent may be required on difficult to wet foliage. Caution: Phytotoxicity has occurred on the following foliage plants: Blechnum gibbum, Crissus antarctica, Ficus triangularis, Frittonia verschaffeltii, Maranta leucostachya, Pachystachys lutea, Plectranthus australis, Polypodium aureum, Polystichum, Pteris ensiformis, Solms-Laubachia. Before treating large plantings spray only a few plants and observe 2 weeks for varietal phytotoxicity.
	Mealybugs Thrips Whiteflies	2.55 (10.5 oz)	As the insects begin to appear. A repeat application, at a 2 week interval, may be necessary for control of mealybugs and whiteflies.	
	Scales (Crawlers)	2/3 lb (10.5 oz)	As crawlers begin to appear. Repeat applications, at a 2 week or more interval, may be necessary where there is continuous crawler production.	
Roses Carnations Chrysanthemums	Aphids Thrips	2/3 lb (10.5 oz)	As aphids begin to appear. As thrips begin to appear or at the tight flower bud stage. Repeat applications may be necessary.	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a hydraulic sprayer as a full coverage spray. Do not apply more often than once every 28 days to Carnations and Chrysanthemums. Caution: Phytotoxicity has occurred on the following Chrysanthemum varieties: Albatross, Bonnie Jean, Dixie, Garland, Gem, Iceberg, Pride, Showoff, Statesman, Tally Ho, Westward Ho, and Wild Honey. Before treating large Chrysanthemum plantings, spray only a few plants and observe two weeks for varietal phytotoxicity.

Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.

NOTE: This product is sold by weight and package is full when packed, but due to fluffy nature this material is inclined to settle.

STORAGE AND DISPOSAL

PROHIBITIONS

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment.
Open dumping is prohibited.

STORAGE

Keep pesticide in original container.
Do not put concentrate or dilute into food or drink containers.
Store in cool, dry place. Protect from excessive heat.
Do not contaminate food or foodstuffs.
Do not store or transport near feed or food.
For help with any spill, leak, fire or exposure involving this material, call day or night 800-457-2622.

PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Completely empty container into application equipment. Do not reuse container. Dispose of empty container in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

IMPORTANT INFORMATION. READ BEFORE USING PRODUCT.

LIMITED WARRANTY: Valent U.S.A. Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for use under average conditions when used strictly in accordance with the directions on the labeling. Valent does not make nor authorize any agent or representative to make any other warranty, guarantee or representation, express or implied, concerning this product. Specifically, NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE IS MADE.

2. Critical and unforeseeable factors beyond Valent's control prevent it from eliminating all risks in connection with the use of this product. Such risks include, but are not limited to, damage to plants and crops to which product is applied, lack of complete control over the handling and application of this product, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit under average conditions for the uses stated on the labeling and even though label directions are followed. Buyer and user acknowledge and assume all risks and liability (except those assumed by Valent under 1 above) resulting from handling, storage, and use of the product.

3. Precautions stated on the labeling should be followed to avoid hazardous exposure to the product.

LDREBAN® - Reg. TM of Dow Chemical Company for chlorpyrifos insecticide
PYDRIN® - Reg. TM of E. I. du Pont de Nemours & Co., Inc. for fenvalerate insecticide
ORTHENE® - Reg. TM of Chevron Chemical Company for acephate insecticide

BEST AVAILABLE COPY

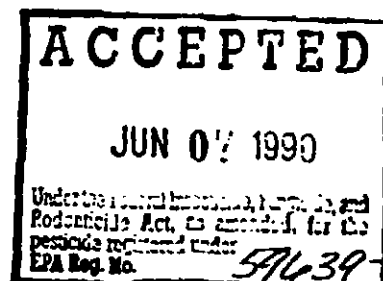
8714

ORTHENE 75 S Soluble Powder
EPA Reg. No. 59639-26
Submitted: May 8, 1990

COPY A

Adults
Larvae

Eggs/Dead Hatch



COPY B

Adults/Larvae: Moths are controlled when they come in direct contact with spray particles during application. Moth kill is most likely to occur when application is made late in the evenings during periods of peak activity.

Eggs: When spray particles come in direct contact with eggs, hatching larvae may be controlled as they consume and emerge from their egg casing.



**SEE BELOW FOR ADDITIONAL
PRECAUTIONARY STATEMENTS**

(INSECTICIDE)

* active ingredient
* 2-phosphate di S O-methyl acetate
* phosphoramidate date:
** ingredients
* 2-phosphate di S O-methyl acetate
Pat No 3,366,000

9. 10/11/2011

Manufactured for
Valent USA Corporation
Route 254 B, Phoenix, AZ 85025
Tel: 602-963-2644

ORTHOENE KILLS FIRE ANTS

PRECANTIDONAR: STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION

CAUTION: Harmful if swallowed. Causes eye irritation. Avoid contact with eyes, skin and clothing. Avoid breathing dust of spray. Wash hands thoroughly after handling. Do not allow children or pets to come into contact with treated areas until sprays have dried.

STATEMENT OF PRACTICAL TREATMENT

[illegible]

Notes to Physicians: Emergency information: call 800 451 7022. Acetate is a cholinesterase inhibitor. Signs of cholinesterase inhibition appear within 15 minutes. 2 PAM may also be used in conjunction with atropine to show the degree of AChE inhibition.

WORKER SAFETY

[illegible]

ENVIRONMENTAL HAZARDS

• This product is toxic to birds. Additions may adversely affect birds in range and treatment areas. Do not add directly to water or wetlands. Cover or incorporate soils.

DIRECTIONS FOR USE

READ ENTIRE LABEL USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS

REENTRY STATEMENTS

[illegible]

DEFINITIONS

Apply to crosswalkers only by sprinkler irrigation systems. Do not apply by chemigation or any other crop or this crop using any other type of irrigation system.

[illegible][illegible]

Crops	Insects	Amount OFFITHRIN 75.5 P/PURIN 2.0 EC Per Acre	Further Use Instructions	Days to Harvest
Cotton Veget. A AZ	Harbors S. Swarms	1.0 lb 2.23 lb az	Begin applications when eggs + insects appear and ap- ply as needed to maintain control. Apply in 30-50 gal. of water with aerial equipment or in 10 to 25 gal. of water with ground equipment. Do not feed grain trash to horses or other animals to graze leaves trash. Do not apply more than two (2) lb. active ingredient of P/PURIN to a crop in a growing season. All applicable directions, restric- tions and precautions on the EPA registered label are to be followed.	21

BEST AVAILABLE COPY

Apply to AZ	2 2/3 lb	Apply in 2 to 5 gals. of water with aerial equipment or in 10 to 25 gals. of water with ground equipment. Do not feed grain to livestock or allow animals to graze treated areas. Do not apply more than 12 1/2 lbs. active ingredient of DITHENE to a crop in a growing season. All applicable directions, restrictions and precautions on the EPA registered label are to be followed.
----------------	----------	---

COTTON SEED HOPPER BUG TREATMENT (EXCEPT AL, CA AND THE BLACK LANDS OF TEXAS)

Crop	Insects	Amount DITHENE 75 S Soluble Powder Per Acre	Further Use Instructions
Cotton	Thrips Cotton Aphids Black (Green) Cutworm	3 to 4 oz	Apply 3 to 4 oz DITHENE 75 S Soluble Powder per acre in the planter box as a dry powder. Even coverage is required for accurate insect control. To obtain even coverage, the planter box must be full of seed and the proper amount of DITHENE 75 S Soluble Powder and mix thoroughly with a stick. Add the remainder of the seed to the planter box and the additional required amount of DITHENE 75 S Soluble Powder followed by thorough mixing. For shelled seed, premix seed with DITHENE 75 S Soluble Powder in a suitable container, then pour treated seed into planter box. Loss of DITHENE 75 S Soluble Powder will occur if no planters are used. Plants grown from improperly covered seed will not achieve insect control. Do not use treated seed for food or feed purposes or process for oil.

FIELD CROPS

Crops	Insects	Amount DITHENE 75 S Per Acre	Further Use Instructions	Days to Harvest
Pepper Squash	Aphids hopper Cutworms Aphids	1 - 1 1/2 lbs	Apply in water at 5 to 10 gals spray per acre by air or 20 to 100 gals. spray per acre by ground. Apply when eggs or insects first appear. Make one repeat application if necessary to maintain control. Do not apply more than 2 1/2 lbs per acre per season.	14
SOYBEANS	Grasshoppers Soybean hopper Cabbage hopper Green Cutworms Velvetbean caterpillar Bean leaf beetle Belted bean beetle	1 to 1 1/2 lbs	Apply in water at 2 to 10 gals spray per acre by air or 10 to 50 gals. spray per acre by ground. Repeat as necessary to maintain control. Do not graze or cut - crops for hay or forage.	14
PEANUTS	Grasshoppers Thrips Corn earworm Fall armyworm Leafhoppers Loopers Velvetbean caterpillar	1 to 1 1/2 lbs 1 to 1 1/2 lbs 1 to 1 1/2 lbs	Apply in water at 10 to 50 gals spray per acre by ground or in 5 to 10 gals. spray per acre by air. Begin applications when insects first appear and repeat as needed to maintain control. Do not feed treated forage or hay to livestock or allow animals to graze treated areas.	14 or dregging

FRUIT CROPS

Crops	Insects	Amount DITHENE 75 S Per Acre	Further Use Instructions	Days to Harvest
Cranberries	Fireworms Squashworms Sparrowhoppers	1 to 1 1/2 lbs	Apply in water by air ground or with sprayers. Use a minimum of 2 gals. spray per acre by air. Use sufficient water to give thorough coverage with ground or sprayer equipment. Make 1 and one application per growing season. Do not apply from start of bloom until all berries set.	30

SPRINKLER IRRIGATION APPLICATION TO CRANBERRIES

This product may only be applied through sprinkler irrigation systems including center pivot, lateral move, and row side (wheel row) travelers, big gun, sand set, or hand move. Do not apply this product through any other type of irrigation system.
Crop injury (lack of effectiveness) or illegal pesticide residues in the crop may result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the label prescribed safety device for public water supplies are in place.

A person knowledgeable of the chemical system and responsible for its operation shall shut the system down and make necessary adjustments should the need arise.

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 backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, spring-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.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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.

Systems must use a metering pump such as a positive displacement metering 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.

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

Solid Set Systems: Apply specified dosage for the entire length of the irrigation period or for a 30 to 60 minute period at the end of a regular irrigation set or at a 30 to 60 minute interval as a separate application not associated with a regular irrigation. Allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water.

To ensure the lines are flushed and free of remaining pesticide, a dye indicator may be injected into the lines to mark the end of the application period. See NOTE.

Center Pivot Systems: Inject the specified dosage per acre continuously for one complete revolution of the system. See NOTE.

NOTE: Constant agitation must be maintained in the chemical supply tank during the entire period of pesticide application. Inject the product with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing.

Application of more than label recommended quantities of irrigation water per acre may result in decreased product performance by removing the chemical from the zone of effectiveness.

BEST AVAILABLE COPY

VEGETABLE CROPS				
Crops	Insects	Amount ORTHOENE P.S. Per Acre	Further Use Instructions	Days to Harvest
Beans and Soybeans Cucumbers Lettuce Peas Pumpkins Squash Tomatoes Turnips Watermelons	Grasshoppers Aphids Bean leaf beetle Bean weevil Cabbage looper Colorado potato beetle Cucumber beetle Cider worm Cottonwood leafhopper Mexican bean beetle Plant bugs Squash vine borer Soybean weevil Tobacco hornworm Whitefly	3 to 2.3 lbs	Apply in water at a minimum of 20 to 30 gallons per acre by air or 10 to 15 gallons per acre by ground. Apply when eggs or insects first appear. Repeat at 7 to 10 day intervals as necessary. Severe insect infestations use higher rates. Do not feed treated vines to livestock.	8 to 10 days 10 to 15 days
Brussels Sprouts Cauliflower	Green peach aphid Cabbage looper Diamondback moth Imported cabbage worm	3 to 1.3 lbs	Apply in water at 25 to 150 gallons per acre by ground or a minimum of 5 gallons per acre by air. Use the high rate when heavy infestations of aphids are present. Begin applications when insects or eggs first appear. Repeat application as needed. Do not apply more than 8 lbs per acre per season to Brussels Sprouts. Do not feed trimmings to livestock or allow animals to graze in treated areas.	8 to 10 days
Carrots	Green peach aphid Beet and leaf-miner Cabbage looper	3 to 1.3 lbs	Apply in water at 50 to 100 gallons per acre by ground or a minimum of 5 gallons per acre by air. Apply when eggs or insects appear and repeat at 3 to 10 day intervals as necessary to maintain control. If plants stop growing before shipment or use. Do not use trimmings for food or feed.	8 to 10 days
Head lettuce Iceberg Iceberg	Green peach aphid Cabbage looper Armyworms	3 to 1.3 lbs	Apply in water at 5 to 10 gallons per acre by air or 10 to 60 gallons per acre broadcast on ground. Apply as necessary to maintain desired control. Do not apply more than 2.3 lbs per acre per season. Do not apply after first head begins to form to crops which are harvested from mid September through November in desert areas of AZ and CA. Do not feed trimmings to livestock or allow animals to graze in treated areas.	10 to 15 days 10 to 15 days
Pepper (non hot type)	Aphids	2.3 lb	For use in the western States and Puerto Rico only. Apply in water at 40 to 150 gallons per acre with ground equipment. Repeat at 7 to 10 day intervals as necessary. Do not exceed 7 applications per season.	10 to 15 days
Sweet Peppers Bell Peppers	Grasshoppers Cabbage looper Green peach aphid Tobacco hornworm European corn borer	3 to 2.3 lb 3 to 1.3 lbs	Apply in water at a minimum of 20 to 30 gallons per acre by air or 10 to 15 gallons per acre by ground. Apply when eggs or insects appear. Repeat as necessary until insects have been reduced to economic numbers.	10 to 15 days

PASTURE RANGE-LAND, WASTELAND				
Crops	Insects	Amount ORTHOENE P.S. Per Acre	Further Use Instructions	Days to Harvest
Pasture Range-land Wasteland	Grasshoppers Crickets Beet Grass Bugs	1.8 to 1.5 lb 0.25 to 0.125 lb acres night-dorm	Apply in water at a minimum of 10 to 20 gallons per acre by air or 10 to 20 gallons per acre by ground. Use the higher rate in thicker vegetation or on larger insects. An approved drift-reducing additive may be added to a d containing drift and reducing or operation of aerial sprays. Do not make more than one application per season. Do not apply when lactating dairy cattle are present. Do not pasture or feed treated hay to lactating dairy cattle within 21 days after application. Remove most animals from treated areas at least one day before slaughter if they were present at application or grazed treated areas within 21 days after application.	21 to 28 days
	Imported Fire Ants	Should be used Dry Should be used Every distribute 1 to 2 teaspoons over the mound Should be used Mix 1 lb in 5 gals of water Apply 1 gal of mix to each mound area by spraying the mound until it is wet and water a four foot diameter circle around the mound	For best results apply the material in the early morning or late afternoon when the ants are most active. Applications made under prolonged hot and dry conditions may be ineffective due to the location of the ants deep within the nest. Grass in treated area may be injured. Treat maximum of 13 mounds per acre. Do not treat mound more than once per season. Do not apply when lactating dairy cattle are present. Do not pasture or feed hay to lactating dairy cattle within 21 days after application. Remove most animals from treated areas at least 1 day before slaughter if they were present at application or grazed treated areas within 21 days after application.	21 to 28 days

SPECIALTY USES				
Crops	Insects	Amount ORTHOENE P.S. Per Acre	Further Use Instructions	Days to Harvest
Non Crop Areas Land borders Lawns Sodded Lawns and borders and borders	Grasshoppers Crickets Beet Grass Bugs	1.8 to 1.5 lb 0.25 to 0.125 lb acres night-dorm	For dairy and seed crop application to grasshoppers in long borders, lawns, roadsides, ditchbanks and borrow pits. Apply in 1 to 5 gallons of water by air or 10 to 20 gallons of water with ground equipment. Use the higher volume when spraying heavier foliage. Do not graze or feed animals cut from treated areas.	21 to 28 days

BEST AVAILABLE COPY

PROBATION OFFICER 75 2

Plants	Insects	Amount ORTHENE 75 S Per 100 Gall	Time of Application	Recommended Application
Container Grown Fruit Trees Such As: Apple - Pear Avocado Camellia Razadadeen etc. Roses / Burnum etc.	Black Fly Aphid Strawberry Root Weevil	1 lb 4 oz	Application should be made by mid September for green house stock and by mid October for out door stock. Contact your local county extension agent for information on the detrimentation and control of root weevils on ornamentals	Apply the specified amount of ORTHENE 75 S Sawdust Powder per 100 gals of solution so as to thoroughly drench the root system.

Preparation of GENTLE Spray Mix using a 16 oz. Measuring Cup

FIGURES AND DIAGRAMS

BEST AVAILABLE COPY

COMMERCIAL TURFGRASS, LAWN, AND OTHER RECREATIONAL TURFGRASS AREAS
DO NOT ALLOW LIVESTOCK TO GRAZE TREATED AREAS DO NOT FEED TREATED GRASS TO LIVESTOCK

Plants	Insects	Amount ORTHENE 75 S Per 1000 Sq. Ft.	Time of Application	Recommended Application
Turfgrass Asiatic & Common Cuckoo	For Armyworm tenes, Striped Armyworm, Southern Armyworm, Cuckoo	1 to 1.2 oz. (1 to 1.5 lbs. per acre)	As the insects appear. A repeat application at 2 weeks intervals may be necessary.	Apply the specified amount of ORTHENE 75 S Soluble Powder per 1000 sq. ft. Use a minimum of 5 gals. water per 1000 sq. ft. to obtain good coverage.
	Chinch Bugs	1.2 to 2.4 oz. (1.5 to 3 lbs. per acre)	Apply as needed for adult populations (check down to 14 days)	Apply the specified amount of ORTHENE 75 S Soluble Powder per 1000 sq. ft. Use 1 to 15 gals. water per 1000 sq. ft. to obtain good coverage.
	Flea	1.2 to 2.4 oz.	Apply as needed for knockdown (1 to 10 days only of feeding adult populations)	
	Sod Webworm (Clematis spp.)	1 to 1.2 oz. (1 to 1.5 lbs. per acre)	As sod webworms begin to appear. Use the higher amount when quick knock down is needed or with heavy infestations. Repeat application may be necessary. Do not repeat at more than 1 week intervals.	Apply the specified amount of ORTHENE 75 S Soluble Powder per 1000 sq. ft. Use 1 to 15 gals. water per 1000 sq. ft. to obtain good coverage.
	Leathopper	1 oz. (2 lbs. per acre)	As the leathoppers begin to appear. A repeat application at 1 week intervals may be necessary.	Apply the specified amount of ORTHENE 75 S Soluble Powder per 1000 sq. ft. Use 1 to 15 gals. water per 1000 sq. ft. to obtain good coverage.
	More Cuckoo (Except Ck.)	1.0 to 1.5 oz. (2 to 3 lbs. per acre)	As more cuckoo begin to appear for knockdown of exist- ing populations. More than one application may be required. Throughout the grow- ing season for heavy infestations, use the higher dosage rate.	Apply the specified amount of ORTHENE 75 S Soluble Powder per 1000 sq. ft. Use 1 to 15 gals. water per 1000 sq. ft. to obtain good coverage.
	Greenbug (Succinea) Grasshoppers	1.0 to 1.5 lbs. per acre	Apply when insects or their damage first appears. Repeat as necessary. Appli- cation may be re- peated at more than 1 week intervals.	Apply the specified amount of ORTHENE 75 S Soluble Powder. Use 8 gals. of water per 1000 sq. ft. to obtain good coverage. Do not mow turfgrass for at least 24 hours after application.

Plants	Insects	Amount ORTHENE 75 S Per 1000 Sq. Ft.	Time of Application	Recommended Application
Turfgrass	Imported Fire Ants	Manual Application— Dry Method Evenly distrib- ute 1 to 2 lbs. spoons level the mound. Broadcast Method Mix 1 oz. in 5 gals. of water. Apply 1 gal. of mix to each mound area by sprinkling the mound until it is wet and treat a four ft. foot diameter circle around the mound.	For best results apply the material in the early morning or late afternoon when the ants are most active. Applications made under prolonged hot and dry conditions may be ineffective due to the location of the ants deep within the nest.	Apply the specified amount of ORTHENE 75 S Soluble Powder as directed. Grass in treated areas may be injured. Do not treat mound more than once per season.

Plants	Insects	Amount ORTHENE 75 S Per 1000 Sq. Ft.	Time of Application	Recommended Application
Dichondra	Cuckoo Flea Beetle 2-week intervals Armyworm Striped Armyworm	1.0 to 1.5 oz. (2 to 3 lbs. per acre)	As the insects appear. Repeat at 2-week intervals as necessary.	Apply the specified amount of ORTHENE 75 S per 1000 sq. ft. Use a minimum of 15 gals. of water per 1000 sq. ft. to obtain good coverage.

OUTDOOR WALK AND PERIMETER SPRAY

Plants	Insects	Amount ORTHENE 75 S Per 1000 Sq. Ft.	Time of Application	Recommended Application
Outdoor Walk and Perimeter area	Ants	16 or 10 (10 lbs.)	Treat early or late in the day as ants are generally less active during these times.	Apply specified amount of ORTHENE 75 S Soluble Powder per each gallon of water used. Apply as a solid treatment to the nest, nest entrance, and surrounding areas during the early night.
	Corroaches Ants Pillbugs Earwigs Perimeter Insects	16 or 10 (10 lbs.)	As the insects appear	Apply specified amount of ORTHENE 75 S Soluble Powder per each gallon of water used. Apply to a band of soil 6 to 10 feet adjacent to the structure and to a height of 2 to 3 feet on the foundation where ants may be active or may find entrance. Also apply a residual insecticide with a paint brush to sur- faces of buildings, window frames, shutters, antennae, screens, doors, porches, garages, carports, around garbage cans and other areas where these insects congregate.

OUTDOOR FLORAL CROPS AND GROUND COVERS

Plants	Insects	Amount ORTHENE 75 S Per 100 Gals.	Time of Application	Recommended Application
Cassia Guhua Lettuce Lily Garden Yarrow Pachy sandra Penny Roses Sedum Sticks Clem Roses Tartan Zinnia	Aphids Thrips Lily	2.3 lb. (10.5 oz.)	As insects begin to appear. Repeat applications may be necessary.	Apply the specified amount of ORTHENE 75 S in 100 gals. water with a hydraulic sprayer. Use a full coverage spray. Multiple applications may cause the "tip burn" or marginal leaf necrosis in some varieties. Test on a few plants to determine varietal susceptibility.
Rose Bottle Bottle	Japanese Beetle	1.3 lb. (21.3 oz.)	As the Japanese Beetle begins to appear. Repeat applications at 2 week intervals may be necessary.	

OUTDOOR FLORAL AND FOLIAGE PLANT CROPS

Plants	Insects	Amount ORTHENE 75 S Per 100 Gals.	Time of Application	Recommended Application
Roses	Thrips	2.3 lb. (10.5 oz.)	As thrips begin to appear. Use the higher amount when the large larvae are present.	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a hydraulic sprayer as a full coverage spray.
Foliage Plants Guhua Lettuce Lily Garden Yarrow Pachy sandra Penny Roses Sedum Sticks Clem Roses Tartan Zinnia	Aphids Thrips Lily	2.3 lb. (10.5 oz.)	As insects begin to appear. Repeat applications at 2 week intervals may be necessary for control of aphids and thrips.	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a hydraulic sprayer as a full coverage spray. The addition of a wetting agent may be required in difficult to wet turfgrass. Caution: Do not use this product on the following foliage:

BEST AVAILABLE COPY

14 3 14

Plants	Insects	Amount ORTHENE 75 S Per 100 Gals	Time of Application	Recommended Application
Roses	Leafrollers	2.3 to 1.1 lb (10.5 to 16 oz)	As leafrollers begin to appear. Use the higher amount when the large larvae are present.	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a hydraulic sprayer as a full coverage spray.
Foliage Plants Ornamentals Asteriscus Canna Pansy	Aphids	1.3 lb (15.3 oz)	As aphids begin to appear.	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a hydraulic sprayer as a full coverage spray. The addition of a wetting agent may be required on difficult to wet foliage.
	Mealybugs Thrips Whiteflies	2.3 lb (10.5 oz)	As the insects begin to appear. A repeat application, at a 2 week interval, may be necessary for control of mealybugs and whiteflies.	Caution: Phytotoxicity has occurred on the following foliage plants: Blechnum gibbum, Cissus antarctica, Ficus triangularis, Fittonia verschaffeltii, Maranta leuconura terchoviana, Pachystachya lutea, Plectranthus australis, Polypodium aureum, Polyschum, Pteris ensiformis, Talarium menziesii. Before treating large plantings spray only a few plants and observe 2 weeks for varietal phytotoxicity.
	Scales (Crawlers)	2.3 lb (10.5 oz)	As crawlers begin to appear. Repeat applications, at a 2 week or more interval, may be necessary where there is continuous crawler production.	
Roses Carnations Chrysanthemums	Aphids Thrips	2.3 lb (10.5 oz)	As aphids begin to appear. As thrips begin to appear or at the tight flower bud stage. Repeat applications may be necessary.	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a hydraulic sprayer as a full coverage spray. Do not apply more often than once every 28 days to Carnations and Chrysanthemums. Caution: Phytotoxicity has occurred on the following Chrysanthemum varieties: Albert Ross, Bonnie Jean, Dixie, Garland, Gem, Iceberg, Pride, Showoff, Statesman, Tally Ho, Westward Ho, and Wild Honey. Before treating large Chrysanthemum plantings, spray only a few plants and observe two weeks for varietal phytotoxicity.

Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.

NOTE: This product is sold by weight and package is full when packed, but due to fluffy nature this material is inclined to settle.

STORAGE AND DISPOSAL

PROHIBITIONS

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment.
Open dumping is prohibited.

STORAGE

Keep pesticide in original container.
Do not put concentrate or dilute into food or drink containers.
Store in cool, dry place. Protect from excessive heat.
Do not contaminate food or foodstuffs.
Do not store or transport near feed or food.
For help with any spill, leak, fire or exposure involving this material, call day or night 800 457-2022.

PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Completely empty canister into application equipment. Do not reuse container. Dispose of empty canister in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

IMPORTANT INFORMATION. READ BEFORE USING PRODUCT.

LIMITED WARRANTY: Valent U.S.A. Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for use under average conditions when used strictly in accordance with the directions on the labeling. Valent does not make nor authorize any agent or representative to make any other warranty, guarantee or representation, express or implied, concerning this product. Specifically, NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE IS MADE.

2. Critical and unforeseeable factors beyond Valent's control prevent it from eliminating all risks in connection with the use of this product. Such risks include, but are not limited to, damage to plants and crops to which product is applied, lack of complete control over the handling and application of this product, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit under average conditions for the uses stated on the labeling and even though label directions are followed. Buyer and user acknowledge and assume all risks and liability (except those assumed by Valent under 1 above) resulting from handling, storage, and use of the product.

3. Precautions stated on the labeling should be followed to avoid hazardous exposure to the product.

LORSBAN® - Reg. TM of Dow Chemical Company for chlorpyrifos insecticide.
PYDRIN® - Reg. TM of E. I. du Pont de Nemours & Co., Inc. for fenvalerate insecticide.
ORTHENE® - Reg. TM of Chevron Chemical Company for acephate insecticide.

BEST AVAILABLE COPY