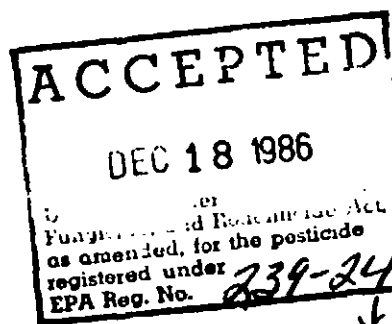




ORTHENE 75 S Soluble Powder
EPA Reg. No. 239-2418
Submitted: November 4, 1986

Transferred to
59639-26

COPY A

Do not allow livestock to graze treated areas. Do not feed treated grass to livestock.

COPY B

Plants	Insects	Amount ORTHENE 75 S	Time of Application	Recommended Application
Turfgrass	Imported Fire Ants	Mound Treatment Dry Method: Evenly distribute 1 to 2 teaspoons over the mound. Drench 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 (4) foot diameter circle around the mound.	For best results apply the material in the early morn- ing or late after- noon when the ants are most active. Applications made under prolonged hot and dry con- ditions may be ineffective due to the location of the ants deep with- in 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.

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CHELON CHEMICAL COMPANY
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**ORTHO**

ORTHENE®

75 S Soluble Powder

(INSECTICIDE)

Active Ingredient
*Acephate (O S Dimethyl acetylphosphorothioate)
Inert Ingredients
*ORTHENE® Acephate U.S. Pat. No. 3,716,600

By Wt
75%
25%

Chevron Chemical Company © 1965
Ortho Agricultural Chemicals Division
San Francisco, CA 94120-7144
R Form 10782 C - Product 5332 Made in U.S.A.
CP No. 239 2418 AA

**KEEP OUT OF REACH OF CHILDREN
CAUTION**
**FOR AGRICULTURAL USE ONLY. NOT FOR SALE TO,
USE, AND STORAGE BY SERVICE PERSONS ONLY.**
**DO NOT STORE IN AREAS ACCESSIBLE
TO CHILDREN.**
SEE CONTAINER LABEL FOR STORAGE AND DISPOSAL

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

STATEMENT OF PRACTICAL TREATMENT

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 (415) 233-3737. Acephate is a cholinesterase inhibitor. If signs of cholinesterase inhibition appear, atropine is antidotal. 2-PAM may also be used in conjunction with atropine. Would not be used alone.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds. Do not apply to water or wetlands. 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.

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 PAMPHLET 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 or vicinity where there may be drift. Do not enter treated areas without protective clothing and sprays have dried. Certain states may require more restrictive reentry intervals. Consult your State Department of Agriculture for further 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

Table of Equivalents

Amount of ORTHENE 75 S Soluble Powder	1 1/3 lbs	1 lb	2/3 lb	4 oz	2 oz
Amount Active Contained	1 lb	1 1/2 lb	2 1/2 lb	3 1/2 lb	7 1/2 lb

COTTON

Crops	Insects	Amount ORTHENE 75 S Per Acre	Further Use Instructions	Days to Harvest
Cotton	Thrips	2 oz to 4 oz	Apply in water at 3 to 10 gals. spray per acre by air minimum 5 gals. acre in CA AZ or 10 to 25 gals. spray per acre by ground	21
	Plantbugs (lygus)	1/3 to 1 1/3 lbs		
	2 1/3 to 1 1/3 lbs (CA AZ)			
	Flea hopper	1 1/3 lb		
	Cotton Aphid (wheat)	2 1/3 to 1 1/3 lbs	Apply when eggs or insects first appear. Repeat as necessary to maintain control.	
	Armyworms	1 1/3 lbs		
	Cabbage looper	2 1/3 to 1 1/3 lbs	Lygus - Use higher rate for lygus adults that have migrated into cotton.	
	2 1/3 to 1 1/3 lbs (AZ)			
Soybeans	2 1/3 to 1 1/3 lbs (AZ)			
	1 lb			
	1 1/3 to 1 1/3 lbs			

FIELD CROPS

Crops	Insects	Amount ORTHENE 75 S Per Acre	Further Use Instructions	Days to Harvest
Peppermint Sagebrush	Aphis Cutworms Aphids	1 1/3 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 2/3 lbs per acre per season.	14
Soybeans	Grasshoppers	1 1/3 to 2 1/3 lb		14
	Soybean looper Cabbage looper Green Cloverworm Velvetbean caterpillar Bean leaf beetle Mexican bean beetle	2 1/3 to 1 1/3 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 vines for hay or forage.	
	Stink bugs Armyworms Three-cornered Aphis hopper Corn Earworm	1 to 1 1/3 lbs		
Peanuts	Grasshoppers	1 1/3 to 2 1/3 lb		14 (at digging)
	Thrips	2 1/3 to 1 lb		
	Corn earworm Fall armyworm Leafhoppers Looper Velvetbean caterpillar	1 to 1 1/3 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.	

FRUIT CROPS

Crops	Insects	Amount ORTHENE 75 S Per Acre	Further Use Instructions	Days to Harvest
Cranberries	Fireworms Spanworms Sparganothis	1 1/3 lbs	Apply in water by air, ground or with sprinklers. Use a minimum of 2 gals. spray per acre by air. Use sufficient water to give thorough coverage with ground or sprinkler equipment. Note: Limit to one application per growing season. Do not apply from start of bloom until all berries set.	90

VEGETABLE CROPS

Crops	Insects	Amount ORTHENE 75 S Per Acre	Further Use Instructions	Days to Harvest
Beans and Lima Beans (Dry and Succulent forms)	Flea hopper Grasshoppers	1 1/3 to 2 1/3 lb		14 (snapbeans or dry beans)
	Aphids Bean leaf beetle Bean leafhopper Cabbage looper Cutworms Green Cloverworm Leafhoppers Mexican bean beetle Plantbugs (lygus) Soybean looper Thrips Whitefly	2 1/3 to 1 1/3 lbs	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.	0 (lima beans - succulent form)
	Armyworms Corn earworm European corn borer	1 to 1 1/3 lbs		
Brussels Sprouts Cauliflower	Green peach aphid	2/3 to 1 1/3 lbs	Apply in water at 25 to 150 gals. spray per acre by ground or a minimum of 5 gals. per acre by air.	14
	Cabbage looper Diamondback moth Imported cabbage worm	1 1/3 lbs	Use the high rate when heavy infestations of aphids are present. Begin applications when insects or eggs first appear. Repeat application at hard if 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.	
Celery	Green peach aphid	2/3 to 1 1/3 lbs	Apply in water at 50 to 100 gals. spray per acre by ground or in a minimum of 5 gals. per acre by air.	21
	Beet and Fall armyworms Cabbage looper	1 1/3 lbs	Apply when eggs or insects appear and repeat at 7 to 10 day intervals as necessary to maintain control. Trim plants (tops removed) before shipment or use. Do not use trimmings (tops) for food or feed.	
Head Lettuce (Crishead type only)	Green peach aphid	2 1/3 to 1 1/3 lbs	Apply in water at 5 to 10 gals. spray per acre by air or 10 to 50 gals. spray per acre broadcast by ground.	21
	Cabbage looper Armyworms	1 1/3 lb	Apply as necessary to maintain desired control. Do not apply more than 6 2/3 lbs per acre per	Spring, summer and early fall crops in all areas and winter crops in Florida and Texas, late fall

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

STATEMENT OF PRACTICAL TREATMENT

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 (415) 233-3237. Acephate is a cholinesterase inhibitor. If signs of cholinesterase inhibition appear, atropine is antidotal. 2 PAM may also be used in conjunction with atropine should not be used alone.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to bees. Do not apply to water or wetlands. 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.

DIRECTIONS FOR USE

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REENTRY STATEMENT

Keep all unprotected persons out of operating areas or vicinity where there may be drift. Do not enter treated areas without protective clothing until sprays have dried. Certain states may require more restrictive reentry intervals. Consult your State Department of Agriculture for further 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

Table of Equivalents

Amount of ORTHENE 75 S Soluble Powder	1 1/3 lbs	1 lb	2/3 lb	4 oz	2 oz
Amount Active Contained	1 lb	3/4 lb	1/2 lb	1/3 lb	1/6 lb

COTTON

Crops	Insects	Amount ORTHENE 75 S Per Acre	Further Use Instructions	Days to Harvest
Cotton	Thrips	2 oz to 4 oz	Apply in water at 3 to 10 gals. spray per acre by air minimum 5 gals. acre in CA, AZ) or 10 to 25 gals. spray per acre by ground	21
	Planthugs (Lygus)	1/3 to 1 1/3 lbs 2/3 to 1 1/3 lbs (CA, AZ)		
	Flea hopper	1/3 lb		
	Cotton Aphid Whitefly	2/3 to 1 1/3 lbs	Apply when eggs or insects first appear. Repeat as necessary to maintain control.	
	Armyworms Cabbage looper	1 1/3 lbs		
	Bollworm Tobacco budworm	2/3 to 1 1/3 lbs (Early) 1 1/3 lbs (CA, AZ)	Lygus - Use higher rate for lygus adults that have migrated into cotton.	
	Stinkbugs (CA, AZ)	1 lb	Bollworm and Tobacco budworm - Early season light infestation use 2/3 lb. per acre. Mid and late season moderate to severe infestations use 1 to 1 1/3 lbs. per acre. Apply when eggs appear and repeat at a 3 to 7 day spray interval.	
	Pink bollworm (CA, AZ)	1 1/3 lbs		
			Do Not apply within 21 days of harvest.	
		Do Not feed on trash to livestock or allow animals to graze on treated areas.		

COTTON TANK MIXES

Crops	Insects	Amount ORTHENE 75 S + LORSBAN 4E Per Acre	Further Use Instructions	Days to Harvest
Cotton	Armyworms	1/3 to 1 1/3 lbs	Do not feed on trash or treated forage to livestock. Do not allow livestock to graze on treated areas.	21
	Bollworm	1 to 2 pts		
	Cabbage Looper			
	Cotton Aphid			
	Cutworms			
	Flea hopper			
	Grasshoppers			
	Pink Bollworm			
	Planthugs			
	(lygus, lygus)			
	Salt Marsh Caterpillar			
	Thrips			
	Tobacco			
	Budworm			
	(CA, AZ)			

Corn earworm Fall armyworm Leafhoppers Loopers Velvetbean caterpillar	1 to 1 1/3 lbs	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.
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FRUIT CROPS

Crops	Insects	Amount ORTHENE 75 S Per Acre	Further Use Instructions	Days to Harvest
Cranberries	Fireworms Spawworms Sparganths	1-1/3 lbs	Apply in water by air, ground or with sprinklers. Use a minimum of 2 gals. spray per acre by air. Use sufficient water to give thorough coverage with ground or sprinkler equipment. Note: Limit to one application per growing season. Do not apply from start of bloom until all berries set.	90

VEGETABLE CROPS

Crops	Insects	Amount ORTHENE 75 S Per Acre	Further Use Instructions	Days to Harvest
Beans and Lima Beans (Dry and Succulent forms)	Flea hoppers	1/3 to 2/3 lb	Apply in water at a minimum of 2 gals. spray per acre by air or 20 to 100 gals. spray per acre by ground.	14 (snapbeans or dry beans)
	Grasshoppers	2/3 to 1-1/3 lbs		
	Aphids Bean leaf beetle Bean leafhopper Cabbage looper Cutworms Green Cloverworm Leafhoppers Mexican bean beetle Planthugs (lygus) Soybean looper Thrips Whitefly	2/3 to 1-1/3 lbs	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 (lima beans - succulent form)
	Armyworms Corn earworm European corn borer	1 to 1-1/3 lbs		
Brussels Sprouts Cauliflower	Green peach aphid	2/3 to 1-1/3 lbs	Apply in water at 25 to 150 gals. spray per acre by ground or a minimum of 5 gals. spray 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 necessary. Do not apply more than 2 lbs. per acre per season to Brussels Sprouts. Do not feed trimmings to livestock or allow animals to graze in treated areas.	4
	Cabbage looper Diamondback moth Imported cabbage worm	1-1/3 lbs		
Celery	Green peach aphid	2/3 to 1-1/3 lbs	Apply in water at 50 to 100 gals. spray per acre by ground or in a minimum of 5 gals. per acre by air. Apply when eggs or insects appear and repeat at 3 to 10 day intervals as necessary to maintain control. Trim plants (tops removed) before shipment or use. Do not use trimming (tops) for food or feed.	21
	Beet and Fall armyworms Cabbage looper	1-1/3 lbs		
Head Lettuce (Crisphead type only)	Green peach aphid	2/3 to 1-1/3 lbs	Apply in water at 5 to 10 gals. spray per acre by air or 10 to 60 gals. spray per acre broadcast by ground. Apply as necessary to maintain desired control. Do not apply more than 2 2/3 lbs. per acre per season. Do not apply after first head begins to form to crops which germinate from mid September through November in desert area of AZ and CA. Do not feed trimmings to livestock or allow animals to graze on treated areas.	21. Spring, summer and early fall crops in all areas and winter crops in Florida and Texas late fall crops in Arizona winter crops in Arizona and California
	Cabbage looper Armyworms	1-1/3 lbs		
Peppers (non bell type)	Aphids	2/3 lb	For use in Midwestern, Eastern States and Puerto Rico only. Apply in water at 40 to 150 gals. spray per acre with ground equipment. Repeat at 7 to 10 day intervals as necessary. Do not exceed 7 applications per season.	7
Sweet peppers (Bell type)	Grasshoppers	1/3 to 2/3 lb	Apply in water at a minimum of 2 gals. spray per acre by air or 25 to 150 gals. spray per acre by ground. Apply when eggs or insects appear. Repeat as necessary until insects have been reduced below economic numbers.	1
	Cabbage looper	2/3 to 1-1/3 lbs		
	Green peach aphid			
	Tobacco budworm European corn borer	1 to 1-1/3 lbs		

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copy A

COMMERCIAL TURFGRASS LAWNS AND OTHER RECREATIONAL TURFGRASS AREAS

PASTURE BANGALAND WETLAND

Crops	Insects	Amount ORTHENE 75 S Per 1,000 Sq Ft	Timing of Application	Days to Harvest
Pasture Bangladesh Wetland	Grasshoppers Mole Crickets Black Grass Bugs	1.0 to 1.5 lb or 1.0 to 1.25 lb per acre	Apply in water at a minimum of 1.2 gal. water per acre or 10 to 20 gal. water per acre by ground	21 for hay
			Use the higher rate in thick vegetation or on large areas of ORTHENE 75 S or HALO 160S. May be applied to and in combination with and without application of insecticides.	
			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. Do not apply to animals from treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures.	
			For best results apply the material in the early morning or late afternoon when the dew is still on the grass.	21
			Applications made under prolonged hot and dry conditions may be reduced due to the fact that the dew may not be present.	
			Grass in treated areas may be grazed.	
			Do not apply when lactating dairy cattle are present. Do not pasture or feed hay to lactating dairy cattle within 21 days after application. Do not apply to animals from treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures.	
			Do not apply when lactating dairy cattle are present. Do not pasture or feed hay to lactating dairy cattle within 21 days after application. Do not apply to animals from treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures.	

SPECIALTY USES

Crops	Insects	Amount ORTHENE 75 S Per 1,000 Sq Ft	Timing of Application	Days to Harvest
Pasture Bangladesh Wetland	Grasshoppers Mole Crickets Black Grass Bugs	1.0 to 1.5 lb or 1.0 to 1.25 lb per acre	Apply in water at a minimum of 1.2 gal. water per acre or 10 to 20 gal. water per acre by ground	21 for hay
			Use the higher rate in thick vegetation or on large areas of ORTHENE 75 S or HALO 160S. May be applied to and in combination with and without application of insecticides.	
			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. Do not apply to animals from treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures.	
			For best results apply the material in the early morning or late afternoon when the dew is still on the grass.	21
			Applications made under prolonged hot and dry conditions may be reduced due to the fact that the dew may not be present.	
			Grass in treated areas may be grazed.	
			Do not apply when lactating dairy cattle are present. Do not pasture or feed hay to lactating dairy cattle within 21 days after application. Do not apply to animals from treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures.	
			Do not apply when lactating dairy cattle are present. Do not pasture or feed hay to lactating dairy cattle within 21 days after application. Do not apply to animals from treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures.	

SMALL SPLOT TREATMENT

Preparation of ORTHENE 75 S Spray (Use 10 to 20 gal. water per 1,000 sq. ft.)

Orthene 75 S (lb)	Water (gal)	Orthene 75 S (lb)	Water (gal)
1.0	10	1.0	10
2.0	20	2.0	20
3.0	30	3.0	30
4.0	40	4.0	40
5.0	50	5.0	50
6.0	60	6.0	60
7.0	70	7.0	70
8.0	80	8.0	80
9.0	90	9.0	90
10.0	100	10.0	100

TREES AND SHRUBS

Plants	Insects	Amount ORTHENE 75 S Per 1,000 Sq Ft	Timing of Application	Days to Harvest
Apple Pear Peach Plum Quince Cherry Almond Walnut Oak Maple Birch Cedar Juniper Sycamore Hickory Chestnut Alder Basswood Boxelder Dogwood Elm Gum Hawthorn Honeylocust Linden Magnolia Mulberry Nectarine Pine Pistachio Pumpkin Raspberry Rhubarb Sage Shadblow Spirea Strawberry Tamar Tartan Viburnum Yew	Aphids Grasshoppers Mole Crickets Black Grass Bugs	1.0 to 1.5 lb or 1.0 to 1.25 lb per acre	Apply in water at a minimum of 1.2 gal. water per acre or 10 to 20 gal. water per acre by ground	21 for hay
			Use the higher rate in thick vegetation or on large areas of ORTHENE 75 S or HALO 160S. May be applied to and in combination with and without application of insecticides.	
			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. Do not apply to animals from treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures.	
			For best results apply the material in the early morning or late afternoon when the dew is still on the grass.	21
			Applications made under prolonged hot and dry conditions may be reduced due to the fact that the dew may not be present.	
			Grass in treated areas may be grazed.	
			Do not apply when lactating dairy cattle are present. Do not pasture or feed hay to lactating dairy cattle within 21 days after application. Do not apply to animals from treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures.	
			Do not apply when lactating dairy cattle are present. Do not pasture or feed hay to lactating dairy cattle within 21 days after application. Do not apply to animals from treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures. Do not apply to animals in pastures of treated areas in pastures.	

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OUTDOOR FLORAL CROPS

Plants	Insects	Amount ORTHENE 75 S Per 100 Gals	Timing of Application	Recommended Application
Daisies Gladiolus Gypsophila Stations Yarrow Stem Flower	Thrips	2.3 lb (10.5 oz)	As thrips begin to appear or at the high 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.
Daisies Stations Yarrow	Lygus Bugs	2.3 lb (10.5 oz)	As lygus bugs begin to appear. Repeat applications may be necessary.	
Roses	Aphids	2.3 lb (10.5 oz)	As aphids begin to appear.	
Roses Boston Ivy	Japanese Beetle	1.1 lb (21.3 oz)	As the Japanese Beetles begin to appear. Repeat applications at 2 week intervals may be necessary.	

GREENHOUSE FLORAL AND FOLIAGE PLANT CROPS

Plants	Insects	Amount ORTHENE 75 S Per 100 Gals	Timing of Application	Recommended Application
Roses	Leafhoppers	2.3 lb (10.5 oz)	As leafhoppers 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 Poinsettia	Aphids Mealybugs Thrips Whiteflies	2.3 lb (10.5 oz)	As aphids begin to appear. As the insects begin to appear. A repeat application at 2 week intervals may be necessary for control of mealybugs and whiteflies.	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: Begonia, Calceolaria, Canna, etc.

Imported Fire Ant	Round Necked— Dry Potted Plants 1 to 2 seasons over the mound	For best results spray the material on the early morning or late afternoon when the ants are most active. Apply during early morning under protection of dry conditions may be effective due to the fact that the ants deep within the soil. Grass in treated area may be sprayed. Do not spray more than once per season. Do not apply when factoring dairy cattle are present. Do not pasture or feed hay to factoring dairy cattle within 24 hours after application. Remove material from treated areas at least 1 day before slaughter if they were present at application or grazed treated areas within 24 days after application.	3	

SPECIALTY MIXES

Crops	Insects	Amount ORTHENE 75 S Per Acre	Further Use Instructions	Days to Harvest
Open Cane Areas	Imported Fire Ant	Round Necked— Dry Potted Plants 1 to 2 seasons over the mound Round Necked Plants 1 to 2 in 5 gals. of water Apply 1 gal. of this to each mound area by spraying the mound until it is wet and treat a four 10 foot diameter circle around the mound.	For best results spray the material on the early morning or late afternoon when the ants are most active. Apply during early morning under protection of dry conditions may be effective due to the fact that the ants deep within the soil. Grass in treated area may be sprayed. Do not spray more than once per season.	

SMALL SPRAY EQUIPMENT

Preparation of ORTHENE Spray Mix using a 16 oz. Measuring Cup		
Label Recommendation ORTHENE in 100 Gals. Water	Operator ORTHENE in 20 Gals. Water	Equivalent ORTHENE in 1 Gal. Water (oz. Gal.)
1 1/2 lb	2 1/2 oz	1
1 lb	1 1/2 oz	1/2
1/2 lb	3/4 oz	1/4

TREES AND SHRUBS				
Plants	Insects	Amount ORTHENE 75 S Per 100 Gals.	Time of Application	Recommended Application
Trees and Shrubs Larvae Hawthorn Crab Apple Rose	Aphids Sawflies Bark Larvae Caterpillars Lace Bug Leafhoppers	1 1/2 lb (15.3 oz)	As the insects begin to appear	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a hydraulic sprayer. The addition of a wetting agent improves control of highly mobile larvae.
	Japanese Beetle Larvae Caterpillars Lace Bug Leafhoppers	2 1/2 lb (10.5 oz)	As the insects begin to appear	*Most effective application: Adjust rates to 1 1/2 lb. per 100 gals. water for Green Ash, Norway Spruce and 1 1/2 lb. per 100 gals. water for Larvae control.
	Scars (Crawlers)	2 1/2 lb (10.5 oz)	As the insects begin to appear. Repeat applications at 2 week intervals where necessary where there is continuous crawling production.	Nursery crops. Before treating large plantings spray only a few plants and observe two weeks for phytotoxicity.
	Ponderosa Pine Needle Miner	2 1/2 lb (10.5 oz)	Time of application is important. Consult your Farm Advisor or County Agent.	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a fine sprayer as a full coverage spray.
Trees and Shrubs	Grasshoppers	2 1/2 lb (10.5 oz)	As the grasshoppers begin to appear	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a fine sprayer as a full coverage spray.
	Caterpillars Oakworm Caterpillars Spruce and Larvae	1 1/2 to 2 1/2 lb (15.3 to 10.5 oz)	As the insects begin to appear. Use the higher amount when the larger larvae are present.	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a fine sprayer as a full coverage spray.
	Japanese Pine Needle Miner	1 lb (10 oz)	Time of application is important. Consult your Farm Advisor or County Agent. Repeat applications will be required for better control of this pest.	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a fine sprayer as a full coverage spray.
	Red Admiral Butterfly	1 lb (10 oz)	Apply when first feeding damage occurs. Repeat applications at 2 week intervals until the feeding has stopped.	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a fine sprayer as a full coverage spray.
	European Beech Scale Larvae Sawflies Butterflies Leafhoppers	1 lb (10 oz)	As the insects begin to appear	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a fine sprayer as a full coverage spray.
	Japanese Beetle	1 1/2 lb (15.3 oz)	As the Japanese Beetle begins to appear. Repeat applications at 2 week intervals where necessary.	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a fine sprayer as a full coverage spray.
Hawthorn (Caterpillars)	Aphids Larvae Caterpillars	1 1/2 lb (15.3 oz)	As the insects begin to appear	Apply the specified amount of ORTHENE 75 S Soluble Powder in 100 gals. water with a fine sprayer as a full coverage spray. Do not apply more than 3 times in a growing season at a 2 week interval. Caution: Phytotoxicity has occurred on the following crops: Apple, Pear, Peach, Plum, Prune, Marionberry, P. Prunella, Rasp. and Strawberry.

		Repeat application may be necessary. Do not repeat at more than 1 week intervals.	Treated areas on which treated grass is present 5 4 5
Leafhopper	1 oz (2-3 1/2 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 1,000 sq. ft. Use 1 to 15 gals. water per 1,000 sq. ft. to obtain good coverage. Do not allow livestock to graze treated areas. Do not feed treated grass to livestock.
Mole Crickets (Except CA)	10 to 15 oz (2.66-5.2 lbs per acre)	As mole crickets begin to appear. For knockdown of existing populations, more than one application may be required throughout the growing season. For heavy infestations, use the higher dosage rate.	Apply the specified amount of ORTHENE 75 S Soluble Powder per 1,000 sq. ft. Use 1 to 15 gals. water per 1,000 sq. ft. to obtain good coverage. Apply during late afternoon or early evening hours and after an irrigation. Do not irrigate after application. Do not allow livestock to graze treated areas. Do not feed treated grass to livestock.
Greenbug, (Schizaphis graminum) Grasshoppers	1/2 oz (1-1 1/3 lbs. per acre)	Apply when insects or their damage first appears. Repeat as necessary. Application is not to be repeated at more than 1 week intervals.	Apply the specified amount of ORTHENE 75 S Soluble Powder. Use 4 gals. of water per 1,000 sq. ft. to obtain good coverage. Do not mow turfgrass for at least 24 hours after application. Do not allow livestock to graze treated areas. Do not feed treated grass to livestock.

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OUTDOOR FLORAL CROPS

Plants	Insects	Amount ORTHENE 75 S Per 100 Gals.	Time of Application	Recommended Application
Daisies Gloxinias Gypsophylla Statice Yarrow Shaw Roses	Thrips	2 1/2 lb (10.5 oz)	As thrips begin to appear or at the light 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.
Daisies Statice Yarrow	Lygus Bugs	2 1/2 lb (10.5 oz)	As lygus bugs begin to appear. Repeat applications may be necessary.	
Roses	Aphids	2 1/2 lb (10.5 oz)	As aphids begin to appear	
Roses Boston Ivy	Japanese Beetle	1 1/2 to 1 3/4 lbs (12.13 oz)	As the Japanese Beetles begin to appear. Repeat applications at 2 week intervals, may be necessary.	

GREENHOUSE FLORAL AND FOLIAGE PLANT CROPS

Plants	Insects	Amount ORTHENE 75 S Per 100 Gals.	Time of Application	Recommended Application
Roses	Leafhoppers	2 1/2 to 1 lb (10.5 to 16 oz)	As leafhoppers 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 Anthurium Orchids Cacti Poinsettia	Aphids	1 1/2 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 1/2 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, Fatsia variegata, Maranta leucocoma hercynica, Plectranthus australis, Polypodium aureum, Polystichum, Pteris ensiformis, Tolmiea menziesii. Before treating large plantings spray only a few plants and observe 2 weeks for varietal phytotoxicity.
	Scales (Crawlers)	2 1/2 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 1/2 lb (10.5 oz)	As aphids begin to appear As thrips begin to appear or at the light 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 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.

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