

5481-8971

03/27/2013

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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Kelly Naujock
Amvac Chemical Corporation
4695 MacArthur Court, Suite 1250
Newport Beach, CA 92660

MAR 27 2013

Subject: Addition of succulent green bean use restrictions and accompanying language
Orthene 75 S Soluble Powder
EPA Reg. No.: 5481-8971
Submission date: October 19, 2012
Decision #: 471425

Dear Ms. Naujock:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records. Please submit one copy of your final printed labeling before you release the product for shipment. If you have any questions regarding this label, please contact Dr. Jennifer Urbanski at 703-347-0156 or urbanski.jennifer@epa.gov.

Sincerely yours,

A handwritten signature in black ink that reads "Venus Eagle".

Venus Eagle
Product Manager (01)
Insecticide-Rodenticide Branch
Registration Division (7505P)

Enclosure- Stamped Label

2/37

ORTHENE[®] 75 S Soluble Powder

[Insecticide in a Water-Soluble Packet]

Active Ingredient	By Weight
*Acephate.....	75.0%
Inert Ingredients.....	25.0%
Total.....	100.0%

*O,S-Dimethyl acetylphosphoramidothioate

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID	
Acephate is an organophosphate, cholinesterase inhibitor.	
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
EMERGENCY INFORMATION	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:</p> <p>For Medical Emergencies phone:.....1-888-681-4261</p> <p>For Transportation Emergencies, including spill, leak or fire, phone:</p> <p>CHEMTREC.....1-800-424-9300</p> <p>For Product Use Information phone : AMVAC.....1-888-462-6822</p>	
NOTE TO PHYSICIAN	
<p>This material contains a cholinesterase inhibitor. Measurement of blood cholinesterase activity may be useful in monitoring exposure but decisions regarding treatment will usually need to be made before test results are available. If signs of cholinesterase inhibition appear, atropine sulfate is antidotal. 2-PAM (PROTOPAM) is also antidotal and may be used in conjunction with atropine but should not be used alone.</p>	

SEE SIDE/BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE.

EPA Reg. No. 5481-8971
EPA Est. No.

Net Contents:
As Marked on Container



ACCEPTED
MAR 27 2013
Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for the
pesticide registered under:

EPA. Reg. No. 5481-8971

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS**CAUTION**

Harmful if swallowed.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical-resistant to this product are Butyl rubber \geq 14 mils, Nitrile rubber \geq 14 mils or Neoprene \geq 14 mils. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

Mixers, Loaders, Applicators and Other Handlers must wear:

- Long sleeved shirt and long pants
- Chemical-resistant gloves such as Butyl rubber \geq 14mils, Nitrile rubber \geq 14 mils or Neoprene \geq 14 mils
- Socks plus shoes..

In addition, Mixers and Loader supporting hopper box seed treatments must wear: a NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N,R, P or HE filter.

In addition, Applicators using low pressure hand wand application equipment must wear: A NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approved number prefix TC-21C or a NIOSH-approved respirator with any N, R, P or HE filter.

See Engineering Controls for additional requirements.

Engineering Controls: Water soluble packets, when used correctly, qualify as a closed mixing/loading system under the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(4)]. Mixers and loaders using water soluble packets must wear: the personal protective equipment required above for Mixer/Loaders, and must be provided, must have immediately available and must use in an emergency (such as a broken package, spill or equipment breakdown) the following PPE: coveralls, chemical-resistant footwear and a NIOSH approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH approved respirator with any N,R, P or HE filter.

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. As soon as possible, wash thoroughly and change into clean clothing.

The use of human flaggers is prohibited.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Cover or soil-incorporate spills.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

This product and its degradate is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

Exposed treated seed may be hazardous to birds and other wildlife. Dispose of all excess treated seed and seed packaging by burial away from bodies of water.

DIRECTIONS FOR USE

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

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- coveralls
- chemical resistant gloves made of any waterproof material
- shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter or allow others to enter until sprays have dried or dusts have settled.

TANK MIXES

NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor.

Read and follow the entire label of each product to be used in the tank mix with this product.

WATER SOLUBLE PACKAGING

MULTIPLE PACKAGING

This bag contains multiple water soluble packets of *Orthene 75S Soluble Powder*. Do not handle the packets with wet gloves or allow the packets to become wet prior to addition to spray tank. Do not break open packets. Refer to the Tables of Equivalents to calculate the number of packets to use. If all packets are not used, close and reseal outer container to protect remaining packet(s).

SINGLE PACKAGING

This bag contains one water soluble packet of *Orthene 75S* Soluble Powder. Do not handle the packet with wet gloves or allow the packet to become wet prior to addition to spray tank. Do not break open packet. Refer to the Tables of Equivalents to calculate the number of packets to use. Open outer bag by pulling perforated tearstrip and drop the unopened inner packet of *Orthene Tobacco Insect Spray* into spray tank.

PREPARATION OF SPRAY SOLUTION

To prepare spray solution, drop the unopened packet(s) of *Orthene 75S* Soluble Powder into a spray tank containing at least one half the total quantity of water required. Direct water at the floating packet(s) and continue to add water with the agitator running until the spray volume is reached. **Do not add any liquid fertilizers, micronutrients or adjuvants to the spray solution until after the packet and its contents have completely dissolved.** Water soluble packet(s) should completely dissolve in approximately five minutes. Dissolution rate may be slowed by cold water, lack of agitation or water containing high concentrations of boron or sulfur.

TABLES OF EQUIVALENTS

Amount of <i>Orthene 75 S</i>	1 1/3 lbs.	1 lb.	2/3 lb.	1/3 lb.	4 oz.	2 oz.
Amount Active Contained	1 lb.	3/4 lb.	1/2 lb.	1/4 lb.	1/5 lb.	1/10 lb.

Table of Equivalents for 1/3 lb. Packet

Rates of <i>Orthene 75 S</i> per Acre	Acres Treated by a 1/3 lb. Packet
4 oz.	1.33
1/3 lb.	1.00
2/3 lb.	0.50
1 lb.	0.33
1 1/3 lbs.	0.25
2 2/3 lbs.	0.13
6 2/3 lbs.	0.05

Table of Equivalents for 2 lb. Packet

Rates of <i>Orthene 75 S</i> per Acre	Acres Treated by a 2 lb. Packet
4 oz.	8.00
1/3 lb.	6.00
2/3 lb.	3.00
1 lb.	2.00
1 1/3 lbs.	1.50
2 2/3 lbs.	0.75
6 2/3 lbs.	0.30

Table of Equivalents for 1 lb. Packet

Rates of <i>Orthene 75 S</i> per Acre	Acres Treated by a 1 lb. Packet
4 oz.	4.00
1/3 lb.	3.00
2/3 lb.	1.50
1 lb.	1.00
1 1/3 lbs.	0.75
2 2/3 lbs.	0.38
6 2/3 lbs.	0.15

Table of Equivalents for 2 1/2 lb. Packet

Rates of <i>Orthene 75 S</i> per Acre	Acres Treated by a 2 1/2 lb. Packet
4 oz.	10.00
1/3 lb.	7.50
2/3 lb.	3.75
1 lb.	2.50
1 1/3 lbs.	1.88
2 2/3 lbs.	0.94
6 2/3 lbs.	0.38

Table of Equivalents for 5 lb. Packet

Rates of <i>Orthene 75 S</i> per Acre	Acres Treated by a 5 lb. Packet
4 oz.	20.00
1/3 lb.	15.00
2/3 lb.	7.50
1 lb.	5.00
1 1/3 lbs.	3.75
2 2/3 lbs.	1.88
6 2/3 lbs.	0.75

Table of Equivalents for 1/3 lb. Packet

Rates of <i>Orthene</i> 75 S per 100 Gals. of Water	Number of 1/3 lb. Packet(s) per 100 Gals. of Water
1/3 lb.	1
2/3 lb.	2
1 lb.	3
1 1/3 lbs.	4

Rates of <i>Orthene</i> 75 S		Treatment Area per 1/3 lb. Packet(s)	
Per Acre	Per 1,000 sq. ft.	Acres	sq. ft.
1 1/3 lbs.	0.5 oz.	0.25	11,000
2 2/3 lbs.	1.0 oz.	0.12	5,400
6 2/3 lbs.	2.5 oz.	0.05	2,200

Table of Equivalents for 2 lb. Packet

Rate of <i>Orthene</i> Turf, Tree & Ornamental WSP per 100 Gals. of Water	Number of Gallons of Water per 2 lb. Packet
1/3 lb.	600
2/3 lb.	300
1 lb.	200
1 1/3 lbs.	150

Rates of <i>Orthene</i> Turf, Tree & Ornamental WSP		Treatment Area per 2 lb. Packet	
Per Acre	Per 1,000 sq. ft.	Acres	sq. ft.
1 1/3 lbs.	0.5 oz.	1.50	64,000
2 2/3 lbs.	1.0 oz.	0.75	32,000
6 2/3 lbs.	2.5 oz.	0.30	12,800

USE INFORMATION

Orthene 75 S is an insecticide for control of pests on selected agricultural crops and in certain non-crop areas. The active ingredient in *Orthene 75 S* is acephate, a water-soluble insecticide readily absorbed by plant roots and foliage to give systemic control of feeding insects. Insect pests are generally controlled more effectively by *Orthene 75 S* through ingestion than by contact. Application of *Orthene 75 S* to maintain control should be repeated only as directed.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR INSECT CONTROL, CROP INJURY AND/OR ILLEGAL RESIDUES.

USE RESTRICTIONS

- For use on turf, use limited to sod farms and golf courses, except when applying to mound or spot treatment for fire ant and harvester ant control.
- Do not apply with low pressure handwand except for control of fire ants as a mound treatment and when used on ornamental trees, shrubs and floral plants grown for non-agricultural or non-commercial use.
- Not for indoor residential use. For greenhouse use, use is limited to commercial greenhouses for use on ornamental, floral, foliage plants and tobacco (floatbed application).

CHEMIGATION

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

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions, (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator and grower must evaluate all factors and make appropriate adjustments when applying this product. Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

- All aerial, ground and air-assisted/airblast application equipment must be properly maintained and calibrated using water as carrier. [*This sentence to be used for products NOT containing "NON-CROP AREAS – Wasteland": Do not apply this product as an ultralow (ULV) spray, or in any carrier other than water.*] [*This sentence to be used for products containing "NON-CROP AREAS – Wasteland: Do not apply this product as an ultralow (ULV) spray, or in any carrier other than water, except as specified in the use instructions for "NON-CROP AREAS – Wasteland"*]
- Use the largest droplet size consistent with good pest control. Small droplets are more prone to spray drift and can be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.
- Do not apply at wind speeds greater than 10 mph at the application site.
- Make applications when wind velocity favors on-target product deposition (approximately 3 to 10 mph).
- Apply as close to target plants as practical to obtain a good spray pattern for adequate coverage.
- For aerial applications, do not apply at heights greater than 10 feet (consistent with flight safety).
- For airblast applications, direct spray above foliage and turn off outward pointing nozzles at row ends and outer rows. Apply only when wind speed is 3 to 10 mph at the application site as measured by an anemometer outside of the treated area on the upwind side.
- For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used and must not exceed 75% of wing span or rotor diameter. The boom width must not exceed 75% of the wingspan or 90% of the rotary blade. Use upwind swath displacement and apply only when wind speed is 3 to 10 mph as measured by an anemometer. Use medium or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground.
- For ground boom applications apply with nozzle height no more than 4 feet above the ground or crop canopy and when wind speed is 10 mph or less at the application site as measured by an anemometer. Use medium or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles. The applicator also must use all other measures necessary to control drift.

BEANS AND LIMA BEANS - Dry Forms , Succulent Forms (Except Green Beans, Which Includes String Beans, Snap Beans and Wax Beans) and Succulent Green Beans Grown Only for Seed.

USE RESTRICTIONS

- Do not feed treated vines to livestock.
- Do not apply more than 2 2/3 lbs product/A (2 lbs ai) *Orthene 75 S* per crop cycle.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3 lb product /A, and a minimum of 7 days for rates exceeding 2/3 lb product/A.

RESTRICTIONS: Use on succulent green beans as a food crop is prohibited (includes string beans, snap beans and wax beans). Succulent green bean use is permitted ONLY if grown for seed.

RESTRICTIONS FOR SUCCULENT GREEN BEANS GROWN FOR SEED:

- Do not feed crop residues to livestock or allow animals to graze treated areas.
- Do not apply to succulent green beans grown for fresh market or processing.
- No portion of the succulent green bean plant may be used or distributed for food or feed purposes.
- Seeds grown from succulent green beans shall bear a tag or container label which forbids use of the seed for human consumption or animal feed.
- Seed grown from succulent green beans may not be distributed for human consumption or animal feed.

TABLE 1 BEANS AND LIMA BEANS - Dry forms , succulent forms (except green beans, which includes string beans, snap beans and wax beans) and succulent green beans grown only for seed. -

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ORTHENE 75 S PER ACRE	REMARKS	DAYS TO HARVEST
FOLIAR By Ground: 20 to 100 gals product/A of spray By Air: Minimum of 2 gals product/A of spray	Fleahopper Grasshopper	1/3 to 2/3 lb	Apply when eggs or insects first appear.	14 (dry beans)
	Aphid (excluding Black Bean Aphid) Bean Leaf Beetle Bean Leafroller Cabbage Looper Cutworms Green Cloverworm Leafhopper Mexican Bean Beetle Plantbugs (Lygus) Soybean Looper Thrip Whitefly (except Sweetpotato or Silverleaf Whitefly)	2/3 to 1 1/3 lbs	Use higher rates within the specified rate range for severe insect infestations.	1 (lima beans – succulent form)
	Armyworm (excluding Beet Armyworm) Corn Earworm European Corn Borer	1 to 1 1/3 lbs		

CELERY

USE RESTRICTIONS

- Do not apply more than 2 2/3 lbs *Orthene 75 S* (2 lbs ai) /A per crop cycle.
- All celery must be trimmed (tops removed) before shipment for use.
- Do not use trimmed tops for food or feed.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3 lb product/A and a minimum of 7 days for rates exceeding 2/3 lb product/A.

TABLE 2 CELERY -

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ORTHENE 75 S PER ACRE	REMARKS	DAYS TO HARVEST
FOLIAR By Ground: 50 to 100 gals product/A of spray By Air: Minimum of 5 gals product/A of spray	Green Peach Aphid	2/3 to 1 1/3 lbs	Apply when eggs or insects first appear.	21
	Cabbage Looper Fall Armyworms	1 1/3 lbs		

COLE CROPS – Brussels Sprouts and Cauliflower

USE RESTRICTIONS

- Do not apply more than 2 2/3 lbs *Orthene 75 S* (2 lbs ai) /A per crop cycle.
- Do not feed trimmings to livestock or allow animals to graze in treated areas.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3 lb product/A and a minimum of 7 days for rates exceeding 2/3 lb product/A.

TABLE 3 COLE CROPS - Brussels Sprouts and Cauliflower -

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ORTHENE 75 S PER ACRE	REMARKS	DAYS TO HARVEST
FOLIAR By Ground: 25 to 150 gals product/A of spray By Air: Minimum of 5 gals product/A of spray	Green Peach Aphid	2/3 to 1 1/3 lbs	Use the high rate when heavy infestations of aphids are present. Apply when eggs or insects first appear. Diamondback Moth Larvae: This insect has demonstrated an ability to develop resistance to various classes of insecticides. Consult your local Agricultural Extension Service for current recommended control practices for this insect.	14
	Cabbage Looper Diamondback Moth Larvae Imported Cabbage Worm	1 1/3 lbs		

COTTON

USE RESTRICTIONS

- Do not use treated seed for food or feed purposes or process for oil.
- Do not feed gin trash or treated forage to livestock.
- Do not allow animals to graze on treated areas.
- Do not apply more than 5 1/3 *Orthene 75 S* lbs (4 lbs of ai) /A per crop cycle. This includes all foliar spray, in-furrow application and seed treatment uses.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3 lb product/A and a minimum of 7 days for rates exceeding 2/3 lb product/A.

For Aerial Application:

- Do not apply more than 1 1/3 lbs *Orthene 75 S* /A per application to cotton grown in AZ and CA.
- Do not apply more than 1 lb *Orthene 75 S* /A per application to cotton grown in all other states except AZ and CA.

TABLE 4 COTTON -

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ORTHENE 75 S PER ACRE	REMARKS ¹	DAYS TO HARVEST
IN-FURROW By Ground: 3 to 5 gals/A of spray.	Aphids (excluding Cotton Aphids in AZ & CA) Black (Greasy) Cutworm (except CA) Thrips (including Western Flower Thrips)	2/3 to 1 1/3 lbs NOTE: For the Blacklands of Texas use 1 1/3 lbs Orthene 75 S/A.	Use flat fan nozzles for in-furrow application. Align nozzles to ensure good spray deposition into the seed furrow. Cone type nozzles are not recommended since unacceptable spray deposition may occur. Securely fasten spray system tubing to furrow opener and check frequently to ensure proper positioning and operation. Orthene 75 S can be mixed with fungicides that are sprayed in-furrow for disease control.	
	FOLIAR By Ground: 10 to 25 galsproduct/A of spray. By Air: 3 to 10 galsproduct/A of spray (minimum of 5 galsproduct/A in AZ & CA) For Aerial Application <ul style="list-style-type: none"> Do not apply more than 1 1/3 lb Orthene 75 S/A per application to cotton grown in AZ and CA. Do not apply more than 1 lb.product/A Orthene 75 S per application to cotton grown in all other states except AZ and CA. 	Thrips (including Western Flower Thrips)	3 oz. to 4 oz	Apply when eggs or insects first appear.
	Plantbugs (Lygus)	1/3 to 1 1/3 lbs 1 to 1 1/3 lbs (AZ & CA)	Apply when eggs or insects first appear. Use highest rate for Lygus adults that have migrated into cotton.	21
	Fleahopper	1/3 lb	Apply when eggs or insects first appear.	21
	Cotton Aphid (excluding AZ & CA)	2/3 to 1 1/3 lbs	This insect may develop resistance to various classes of insecticides. Consult your local Agricultural Extension Service for current control recommendations.	21
	Whitefly (excluding Silverleaf Whitefly/Sweetpotato Whitefly)	2/3 to 1 1/3 lbs		21
	Armyworms (excluding Beet Armyworm) Cabbage Looper	1 1/3 lbs	Apply when eggs first appear.	21
	Bollworm Tobacco Budworm Adults Larvae Eggs/Deadhatch®	2/3 to 1 1/3 lbs (East of Rockies) 1 1/3 lbs (AZ & CA) 1/3 to 2/3 lbs	Early Season: Use 2/3 lb /A for light infestation. Mid and Late Season: Use 1 to 1 1/3 lbs. product/A for moderate to severe infestations. Apply when eggs first appear. Moths of budworm larvae are controlled by direct contact with spray. Moth kill is most likely to occur when late evening applications are made. Deadhatch: Control of emerging larvae by consumption of treated egg casings.	21

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ORTHENE 75 S PER ACRE	REMARKS ¹	DAYS TO HARVEST
	Stinkbugs	1 lb	Apply when eggs first appear.	21
	Pink Bollworm (AZ & CA)	1 1/3 lbs	Apply when insects first appear.	21
	Cutworms	1 lb	Ground application is recommended. Aerial applications are less effective, but may be used. Control is most effective when ground application is made in the evenings and sprays are directed toward the base and lower portion of plant. Apply when insects first appear or damage is first noted.	21

¹For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3 lbproduct/A and a minimum of 7 days for rates exceeding 2/3 lbproduct/A.

RESISTANCE MANAGEMENT

Cotton pest control programs, especially those for control of Silverleaf Whitefly populations, should employ a properly designed resistance management strategy. Such resistance management strategies include mixture or rotation of alternative classes of chemistry including organophosphates, carbamates, pyrethroids or insect growth regulators. Consult your state or area agricultural extension service for local resistance management strategies and advice on alternative insecticides.

COTTON TANK MIXES

USE RESTRICTIONS

- Do not feed gin trash or treated forage to livestock.
- Do not allow livestock to graze on treated areas.
- Do not apply more than 5 1/3 lbs *Orthene 75 S* (4 lbs ai) /A per crop cycle. This includes all foliar spray, in-furrow application and seed treatment uses.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3 lbproduct/A and a minimum of 7 days for rates exceeding 2/3 lbproduct/A.

For Aerial Application:

- Do not apply more than 1 1/3 lbs *Orthene 75 S* /A per application to cotton grown in AZ and CA.
- Do not apply more than 1 lb *Orthene 75 S* /A per application to cotton grown in all other states except AZ and CA.

Always read and follow all label directions when using any pesticide alone or in tank mix combinations. Observe all restrictions and precautions which appear on all product labels. The most restrictive labeling applies when using a tank mix.

12/37

TABLE 5 COTTON TANK MIXES -

APPLICATION METHOD	PESTS CONTROLLED	ORTHENE 75 S AND TANK MIX PARTNER	AMOUNT OF ORTHENE 75 S + TANK MIX PARTNER PER ACRE	REMARKS ¹	DAYS TO HARVEST
<p>FOLIAR</p> <p>By Ground: 10 to 25 galsproduct/A spray.</p> <p>By Air: 3 to 10 galsproduct/A of spray (minimum 5 galsproduct/A in CA).</p> <p>For Aerial Application: Do not apply more than 1 1/3 lbs <i>Orthene 75 S</i> /A per application to cotton grown in AZ and CA. Do not apply more than 1 <i>Orthene 75 S</i> lb/A per application to cotton grown in all other states except AZ and CA.</p>	<p>Silverleaf Whitefly Sweetpotato Whitefly</p>	<p>ORTHENE 75 S</p> <p>+</p> <p>Danitol ® 2.4 EC</p>	<p>2/3 to 1 1/3 lbs</p> <p>+</p> <p>10 2/3 to 16 fl oz</p>	<p>Comply with all applicable directions, restrictions and precautions on the EPA registered label for Danitol 2.4 EC Spray.</p>	<p>21</p>

¹For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3 lb.product/A and a minimum of 7 days for rates exceeding 2/3 lbproduct/A.

continued

TABLE 5 COTTON TANK MIXES (continued)

APPLICATION METHOD	PESTS CONTROLLED	ORTHENE 75 S AND TANK MIX PARTNER	AMOUNT OF ORTHENE 75 S + TANK MIX PARTNER PER ACRE	REMARKS ¹	DAYS TO HARVEST
<p>FOLIAR</p> <p>By Ground: 10 to 25 gals/product/A spray.</p> <p>By Air: 3 to 10 gals/product/A of spray (minimum 5 gals/A in AZ and CA)</p> <p>For Aerial Application: Do not apply more than 1 1/3 lbs <i>Orthene</i> 75 S /A per application to cotton grown in AZ and CA. Do not apply more than 1 lb <i>Orthene</i> 75 S /A per application to cotton grown in all other states except AZ and CA.</p>	<p>Armyworms (excluding Beet Armyworm)</p> <p>Bollworm</p> <p>Cabbage Looper</p> <p>Cotton Aphid</p> <p>Cutworms</p> <p>Fleahopper</p> <p>Grasshoppers</p> <p>Pink Bollworm</p> <p>Plantbugs (Lygus, Mirids)</p> <p>Salt Marsh Caterpillar</p> <p>Thrips (including Western Flower Thrips)</p> <p>Tobacco Budworm</p> <p>Whitefly (excluding Silverleaf/Sweetpotato Whitefly)</p>	<p><i>Orthene</i> 75 S</p> <p>+</p> <p>Lorsban® 4E</p>	<p>1/3 to 1 1/3 lbs</p> <p>+</p> <p>1 to 2 pts</p>	<p>Comply with all applicable directions, restrictions and precautions on the EPA registered label for Lorsban 4 E.</p> <p>Cutworms: Use 1 lb <i>Orthene</i> 75 S /A of.</p> <p>By Ground: Ground application is recommended.</p> <p>Control is most effective when ground application is made in the evenings and sprays are directed toward the base and lower portion of plant.</p> <p>By Air: Aerial applications are less effective, but may be used.</p> <p>Apply when insects first appear or when damage is first noted.</p>	21

¹For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3 lbproduct/A and a minimum of 7 days for rates exceeding 2/3 lbproduct/A.

RESISTANCE MANAGEMENT

Cotton pest control programs, especially those for control of Silverleaf Whitefly populations, should employ a properly designed resistance management strategy. Such resistance management strategies include mixture or rotation of alternative classes of chemistry including organophosphates, carbamates, pyrethroids or insect growth regulators. Consult your state or area agricultural extension service for local resistance management strategies and advice on alternative insecticides.

COTTON TANK MIXES WITH PYRETHROIDS

USE RESTRICTIONS

- Do not feed gin trash or treated forage to livestock.
- Do not allow livestock to graze on treated areas.
- Do not apply more than 5 1/3 lbs *Orthene* 75 S (4 lbs ai) /A per crop cycle. This includes all foliar spray, in-furrow application and seed treatment uses.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3 lbproduct/A and a minimum of 7 days for rates exceeding 2/3 lbproduct/A.

For Aerial Application:

- Do not apply more than 1 1/3 lb *Orthene* 75 S /A per application to cotton grown in AZ and CA.
- Do not apply more than 1 lb *Orthene* 75 S /A per application to cotton grown in all other states except AZ and CA.

Synthetic Pyrethroids should be used within the guidelines of state and/or regional resistance management programs and recommendations.

Always read and follow all label directions when using any pesticide alone or in tank mix combinations. Observe all restrictions and precautions which appear on all product labels. The most restrictive labeling applies when using a tank mix.

TABLE 6 COTTON TANK MIXES WITH PYRETHROIDS -

APPLICATION METHOD	PESTS CONTROLLED	ORTHENE 75 S AND TANK MIX PARTNER	AMOUNT OF ORTHENE 75 S + TANK MIX PARTNER PER ACRE	REMARKS ¹	DAYS TO HARVEST
FOLIAR By Ground: 10 to 25 galsproduct/A spray. By Air: 3 to 5 galsproduct/A spray (minimum 5 galsproduct/A in AZ and CA). See aerial remarks for Cutworms. For Aerial Application: Do not apply more than 1 1/3 lb <i>Orthene 75 S/A</i> per application to cotton grown in AZ and CA. Do not apply more than 1 lb <i>Orthene 75 S/A</i> per application to cotton grown in all other states except AZ and CA.	Aphids Bollworm Cabbage Looper Cotton Leaf Perforator Cutworms Fall Armyworm Fleahoppers Pink Bollworm (AZ & CA) Plantbugs Stinkbugs Sweetpotato/Silverleaf Whitefly Thrips (including Western Flower Thrips) Tobacco Budworm Whitefly	<i>Orthene 75 S</i> + one of the following:	2/3 lb to 1 1/3 lbsproduct/A + one of the following:	Apply when eggs or insects first appear. Stinkbugs: Use 1 lb <i>Orthene 75 S/A</i> of *Cutworms: Use 1 lb <i>Orthene 75 S/A</i> of By Ground: Ground application is recommended.	21
		Ammo® 2.5 EC*	Refer to the Ammo 2.5 EC approved label for use instructions.		21
		Asana® XL*	Refer to the Asana XL approved label for use instructions.		21
		Baythroid® 2 EC	Refer to the Baythroid 2 EC approved label for use instructions.		21
		Capture® 2 EC	Refer to the Capture 2 EC approved label for use instructions.		21
FOLIAR By Ground: 10 to 25 galsproduct/A spray. By Air: 3 to 5 galsproduct/A spray (minimum 5 galsproduct/A in AZ and CA). See aerial remarks for Cutworms ²	Aphids Bollworm Cabbage Looper Cotton Leaf Perforator Cutworms Fall Armyworm Fleahoppers Pink Bollworm (AZ & CA) Plantbugs Stinkbugs Sweetpotato/Silverleaf Whitefly Thrips (including Western Flower Thrips) Tobacco Budworm Whitefly	Karate® 1 E (except CA)	Refer to the Karate 1 E approved label for use instructions.	Control is most effective when ground application is made in the evenings and sprays are directed toward the base and lower portion of plant. By Air: 3 to 10 galsproduct/A spray (minimum 5 galsproduct/A in CA) Aerial applications are less effective, but may be used. Apply when eggs or insects first appear or damage is first noted.	21

¹For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3 lbproduct/A and a minimum of 7 days for rates exceeding 2/3 lbproduct/A.

²For Aerial Application: Do not apply more than 1 1/3 lb *Orthene 75 S/A* per application to cotton grown in AZ and CA. Do not apply more than 1 lb *Orthene 75 S/A* per application to cotton grown in all other states except AZ and CA.

RESISTANCE MANAGEMENT

Cotton pest control programs, especially those for control of Silverleaf Whitefly populations, should employ a properly designed resistance management strategy. Such resistance management strategies include mixture or rotation of alternative classes of chemistry including organophosphates, carbamates, pyrethroids or insect growth regulators. Consult your state or area agricultural extension service for local resistance management strategies and advice on alternative insecticides.

15/37

COTTON
[Soluble Powder Hopper Box Use]

USE RESTRICTIONS

- Do not use treated seed for food or feed purposes or process for oil.
- Do not feed gin trash to livestock.
- Do not allow animals to graze on treated areas.
- Do not apply more than 5 1/3 lbs *Orthene 75 S* (4 lbs ai) /A per crop cycle. This includes all foliar spray, in-furrow application and seed treatment uses.
- *Orthene 75 S* cotton seed hopper box treatment is not permitted in Arizona, California and the Blacklands of Texas.

COTTON –

APPLICATION METHOD	PESTS CONTROLLED	RATES OF <i>ORTHENE 75 S</i> PER ACRE	REMARKS	DAYS TO HARVEST
Hopper Box	Black (Greasy) Cutworm Cotton Aphids Thrips (including Western Flower Thrips)	3 to 4 oz	<p>Add dry <i>Orthene 75 S</i> to seed in the planter box to achieve an application rate of 3 to 4 ozproduct/A.</p> <p>Even coverage of seed is required for acceptable insect control. Plants grown from improperly treated seed may not exhibit insect control. To obtain even coverage, fill planter box 1/2 full of seed, add 1/2 of required <i>Orthene 75 S</i> and mix thoroughly. Add remainder of seed and <i>Orthene 75 S</i> to the hopper box and thoroughly mix.</p> <p>Improved distribution of <i>Orthene 75 S</i> on seed can be achieved by premixing both in a separate container and then transferring treated seed to hopper box.</p> <p>Use of <i>Orthene 75 S</i> with air planters is not recommended since loss of product will occur.</p>	At-planting application

16/37

CRANBERRY

USE RESTRICTIONS

- X Do not make more than one application *Orthene 75 S* per growing season.
- X Do not apply more than 1 1/3 lbs *Orthene 75 S* (1 lb ai) /A per season.
- X Do not apply from start of bloom until all berries set.

TABLE 7 CRANBERRY –

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ORTHENE 75 S PER ACRE	REMARKS	DAYS TO HARVEST
FOLIAR By Ground or Sprinkler: Sufficient water to give thorough coverage. By Air: Minimum of 2 gals/product/A of spray	Cranberry Blossom Worm Cranberry Cutworm Gypsy Moth False Armyworm Fireworms Spanworms Sparganothis	1 1/3 lbs	SPRINKLER IRRIGATION APPLICATION TO CRANBERRIES: This product may only be applied through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, travelers, big gun, solid 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.	90

Chemigation: 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 systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, 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 solenoid 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 injection 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 System: 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 as a 30 to 60 minute injection 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 insecticide application. Inject the product with a positive displacement pump into the main line ahead of a right turn to ensure 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.

HEAD LETTUCE - Crisphead Type Only

USE RESTRICTIONS

- Do not apply more than 2 2/3 lbs *Orthene 75 S* (2 lbs ai) /A per crop cycle.
- Do not feed trimmings to livestock or allow animals to graze on treated areas.
- AZ & CA, (desert areas) Do not apply after first head begins to form in crops, which germinate from mid September through November.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3 lbproduct/A and a minimum of 7 days for rates exceeding 2/3 lbproduct/A.

TABLE 8 HEAD LETTUCE - Crisphead Type Only -

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ORTHENE 75 S PER ACRE	REMARKS	DAYS TO HARVEST
FOLIAR By Ground: 10 to 60 galsproduct/A of spray broadcast By Air: Minimum of 5 galsproduct/A of spray	Aster Leafhopper Green Peach Aphid	2/3 to 1 1/3 lbs		21 Spring, Summer and early Fall crops in all areas, Winter crops in Florida and Texas, late Fall crops in Arizona and Winter crops in Arizona and California.
	Armyworm (excluding Beet Armyworm) Cabbage Looper	1 1/3 lbs		

MINT - Peppermint and Spearmint

USE RESTRICTIONS

- Do not apply more than 2 2/3 lbs *Orthene 75 S* (2 lbs ai) /A per crop cycle.
- Do not graze treated areas.
- Do not feed spent mint hay to animals.
- For repeat application on Alfalfa Looper, Aphid and Cutworm, use a minimum spray interval of 3 days for application rates up to and including 2/3 lbsproduct/A and a minimum of 7 days for rates exceeding 2/3 lbsproduct/A.

TABLE 9 MINT - Peppermint and Spearmint -

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ORTHENE 75 S PER ACRE	REMARKS	DAYS TO HARVEST
FOLIAR By Ground: 20 to 100 galsproduct/A of spray By Air: 5 to 10 galsproduct/A of spray	Alfalfa Looper Aphid Cutworm	1 1/3 lbs (21.25 oz)	Apply when eggs or insects first appear.	14
FOLIAR By Ground: 40 to 100 galsproduct/A of spray	Strawberry Root Weevil Adult Black Vine Weevil Adult	1 1/3 lbs. (21.25 oz)	Strawberry Root and Black Vine Weevil: For control, apply in water in a minimum of 40 gals spray per acre by ground. Good spray coverage and canopy spray penetration is critical for control. Increase spray volume and pressure with tall or dense mint canopy. Apply after adult emergence is complete but prior to egg laying. Apply at dusk or during the night on a warm still evening. Maximum number of applications per year is 2. The minimum application interval is 7 days.	14

18/37

NON-BEARING CITRUS

USE RESTRICTIONS

- Do not graze treated areas.
- DO NOT HARVEST citrus for one year after treatment.

TABLE 10 NON-BEARING CITRUS -

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ORTHENE 75 S PER ACRE	REMARKS
FOLIAR By Ground: 100 to 200 galsproduct/A of spray	Aphids Grasshoppers Katydid Mealybug Orangedog Plantbug Thrip Whitefly (except Sweetpotato/Silverleaf)	2/3 lb	For repeat applications use a minimum spray interval of 3 days.
	Citrus Blackfly*	2/3 to 1 lb	Apply when eggs or insects first appear. Use the high rate when a heavy infestation is present. For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3 lbproduct/A, and a minimum of 7 days for rates exceeding 2/3 lbproduct/A
	Ants (excluding Fire, Harvester, Carpenter and Pharaoh Ants*)	1 lb	For repeat applications use a minimum spray interval of 7 days.
Spray individual juvenile or non-bearing trees for coverage with total application not to exceed specified rate in lbs per acre. Length of residual activity will depend upon spray coverage and the amount of moisture following application.			
SOIL MOUND TREATMENT DRENCH METHOD	Ants (excluding Carpenter and Pharaoh Ants*)	Mix one 1/3 lb water soluble packet in 26.7 gals water. [text above changes with size of water soluble packet. See below]	Apply 1 gal of mix to each mound area by sprinkling the mound until it is wet and treat a 4 ft 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.

*Not registered in CA for control of Citrus Blackfly and Harvester Ants.

- [To be printed on 1/3 lb Size Water Soluble Packaging.]
Mix one 1/3 lb water soluble packet of Orthene 75 S in 26.6 gals of water
- [To be printed on 1 lb Size Water Soluble Packaging.]
Mix one 1 lb water soluble packet of Orthene 75 S in 80 gals of water
- [To be printed on 2 lb Size Water Soluble Packaging.]
Mix one 2 lb water soluble packet of Orthene 75 S in 160 gals of water
- [To be printed on 2 1/2 lb. Size Water Soluble Packaging.]
Mix one 2 1/2 lb water soluble packet of Orthene 75 S in 200 gals of water
- [To be printed on 5 lb. Size Water Soluble Packaging.]
Mix one 5 lb water soluble packet of Orthene 75 S in 400 gals of water

NON-CROP AREAS - Field Borders, Fencerows, Roadsides, Ditchbanks, Borrow Pits

USE RESTRICTIONS

- Do not graze or feed vegetation cut from treated areas.

TABLE 11 NON-CROP AREAS - Field Borders, Fencerows, Roadsides, Ditchbanks, Borrow Pits -

APPLICATION METHOD	PEST CONTROLLED	RATES OF ORTHENE 75 S PER ACRE	REMARKS
FOLIAR By Ground: 10 to 20 galsproduct/A of spray By Air: 1 to 5 galsproduct/A of spray (minimum of 5 galsproduct/A in CA)	Grasshopper	1/3 lb	For early to mid-season application. Use the higher volumes when spraying dense foliage. An approved drift retardant may be added to aid in controlling drift and reducing evaporation of aerial sprays.

NON-CROP AREAS - Wasteland

USE RESTRICTIONS

- Do not make more than one application per season.
- Do not graze or feed vegetation cut from treated areas.

TABLE 12 NON-CROP AREAS - Wasteland -

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ORTHENE 75 S PER ACRE	REMARKS
FOLIAR By Ground: 10 to 20 galsproduct/A of spray By Air: 1/2 galproduct/A of spray (minimum of 5 galsproduct/A in CA)	Black Grass Bug Grasshopper Mormon Cricket	1/8 to 1/6 lb	Use the higher volumes when spraying dense foliage. An approved drift retardant may be added to aid in controlling drift and reducing evaporation of aerial sprays.

**NON-CROP AREAS
[Soluble Powder Ant Use]**

CROPS	PESTS CONTROLLED	AMOUNT ORTHENE 75 S	TIME OF APPLICATION	RECOMMENDED APPLICATION
Non-Crop Areas	Imported Fire Ants and Harvester Ants	Mound Treatment – Dry Method: Evenly distribute 1 to 2 tsps over 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 <i>Orthene 75 S</i> as directed. Grass in treated areas may be injured. Do not treat mound more than once per season.

20/37

PEANUTS

USE RESTRICTIONS

- Do not feed treated forage or hay to livestock.
- Do not allow animals to graze on treated areas.
- Do not apply more than 5 1/3 lbs *Orthene 75 S* (4.0 lbs ai) /A per crop cycle.
- This includes the use of *Orthene 75 S* on peanuts as a foliar spray in addition to the peanut planter box seed treatment use.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3 lbproduct/A and a minimum of 7 days for the rates exceeding 2/3 lbproduct/A.

TABLE 13 PEANUTS -

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ORTHENE 75 S PER ACRE	REMARKS	DAYS TO HARVEST
FOLIAR By Ground: 10 to 50 galsproduct/A of spray By Air: 5 to 10 galsproduct/A of spray	Grasshopper	1/3 to 2/3 lb	Apply when eggs or insects first appear.	14 (of digging)
	Thrip	1/2 to 1 lb	<i>Orthene 75 S</i> can be tank mixed with registered at-cracking and early post-emergence peanut herbicides, provided those products do not prohibit tank mixes, provided the most restrictive of label limitations and precautions are observed, and provided no label dosage rates are exceeded.	
	Corn Earworm Fall Armyworm Leafhopper Looper Velvetbean Caterpillar	1 to 1 1/3 lbs	To determine physical compatibility, pour the recommended proportions of each chemical with the same proportion of water as will be present in the chemical supply tank into a suitable container, mix thoroughly and allow to stand for five minutes. If the combination remains mixed, or can be remixed readily, the mixture is considered physically compatible. When mixing wettable powder or dry flowable formulations, add and disperse these first, then add liquid pesticides. Conduct another compatibility test at concentrations which will be present in the irrigation lines. If there is any separation, which cannot be remixed readily, AMVAC recommends that the combination not be used. Combinations should be kept agitated and should be applied immediately. Do not allow combinations to sit for prolonged periods in the chemical supply tank or irrigation lines.	

21/37

PEANUTS
[Soluble Powder Hopper Box Use]

USE RESTRICTIONS

- Do not apply more than 5 1/3 lbs ORTHENE 75 S (4 lbs ai) /A per crop cycle. This includes the use of ORTHENE 75 S on peanuts as foliar sprays in addition to the peanut planter box seed treatment use.
- Do not use treated seed for food or feed.

PEANUTS -

CROP	PESTS CONTROLLED	RATES OF ORTHENE 75 S PER 100 LBS OF SEED	REMARKS
Planter Box Seed Treatment Application - Hopper Box	Thrips	4 oz DO NOT apply more than 4 oz per acre.	<p>Apply <i>Orthene 75 S</i> at a rate of 4 oz per 100 lbs of peanut seed in the planter box as a dry powder. Even coverage of seed is required for acceptable insect control.</p> <p>MIXING: The following procedure for application of <i>Orthene 75 S</i> to peanut seed must be followed to ensure complete and adequate coverage:</p> <p>STEP 1: Fill planter box 1/3 full of seed. Apply 1/3 of total amount of <i>Orthene 75 S</i> evenly over the surface of the peanuts.</p> <p>STEP 2: Fill planter box 2/3 full of seed. Apply 1/3 of total amount of <i>Orthene 75 S</i> evenly over the surface of the peanuts.</p> <p>STEP 3: Fill planter box with remaining seed. Apply 1/3 of total required amount of <i>Orthene 75 S</i> evenly over the surface of the peanuts.</p> <p>DO NOT attempt to mix <i>Orthene 75 S</i> with the seed peanuts by stirring or other mechanical agitation. Such action will result in unacceptable damage to seed prior to planting.</p>

22/37

PEPPERS - Bell

USE RESTRICTIONS

- Do not apply more than 2 2/3 lbs *Orthene 75 S* (2 lbs ai) /A per crop cycle.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3 lbproduct/A and a minimum of 7 days for rates exceeding 2/3 lbproduct/A.

TABLE 14 PEPPERS - Bell -

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ORTHENE 75 S PER ACRE	REMARKS	DAYS TO HARVEST
FOLIAR By Ground: 25 to 150 gals/A of spray By Air: Minimum of 3 galsproduct/A of spray (minimum of 5 galsproduct/A in CA)	Grasshopper	1/3 to 2/3 lb	Apply when eggs or insects first appear.	7
	Cabbage Looper Green Peach Aphid Tobacco Hornworm	2/3 to 1 1/3 lbs		
	European Corn Borer	1 to 1 1/3 lbs		

PEPPERS - Non-Bell

FOR USE ONLY IN STATES EAST OF THE MISSISSIPPI RIVER AND IN PUERTO RICO.

USE RESTRICTIONS

- Do not apply more than 1 1/3 lbs *Orthene 75 S* (1 lb ai) /A per crop cycle.

TABLE 15 PEPPERS - Non-Bell -

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ORTHENE 75 S PER ACRE	REMARKS	DAYS TO HARVEST
FOLIAR By Ground: 40 to 150 galsproduct/A of spray	Aphids	2/3 lb	For repeat application use a minimum spray interval 3 days.	7

SOYBEAN

USE RESTRICTIONS

- Do not graze or cut vines for hay or forage.
- Do not apply more than 2 lbs *Orthene* 75 S (1.5 lbs ai/A) /A of per season.
- Do not apply *Orthene* 75 S within 14 days of harvest.
- For rates up to 0.67 lbproduct/A, at least 3 days must pass between applications of *Orthene* 75 S.
- For rates between 0.67 lbproduct/A and 1.33 lbsproduct/A, at least 7 days must pass between applications of *Orthene* 75S.
- Always read and follow all label directions, restrictions and precautions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.

TABLE 16 – SOYBEAN –

APPLICATION METHOD	PESTS CONTROLLED	RATES OF <i>ORTHENE</i> 75 S PER ACRE	REMARKS	DAYS TO HARVEST
FOLIAR By Air: 5 to 10 galsproduct/A of spray By Ground: 10 to 50 galsproduct/A of spray	Grasshopper Thrips	0.33 to 0.67 lb	Repeat treatment as necessary to maintain control, but do not exceed a maximum of 2 lbsproduct/A (1.5 lbs aiproduct/A) per season.	14
	Potato Leafhopper Stink Bugs	0.67 to 1.33 lbs		
	Armyworms (except Beet) Bean Leaf Beetle Cabbage Looper Green Cloverworm Mexican Bean Beetle Soybean Aphid Threecornered Alfalfa Hopper Velvetbean Caterpillar	1.0 to 1.33 lbs		

TOBACCO

USE RESTRICTIONS

- Do not apply more than 5 1/3 lbs *Orthene 75 S* (4 lbs ai/A) /A per crop cycle. This includes the use of *Orthene* in transplant water, plant bed, soil, float bed (greenhouse) and foliar applications.

TABLE 17. TOBACCO (EXCEPT CA) -

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ORTHENE 75 S PER ACRE	REMARKS	DAYS TO HARVEST
FLOATBED FOLIAGE: Mix three 1/3 lb water soluble packets in 130.5 gals of water.	Cutworm Flea Beetle Green Peach Aphid Tobacco Aphid	1 lb	Apply 3 gals of spray solution for every 1,000 sq ft of bed. Apply evenly to ensure thorough coverage. NOTE: Floatbed water should be disposed of in the transplanted field as transplanter water or foliar spray. For repeat applications use a minimum spray interval of 7 days.	
PLANT BED FOLIAGE: Mix three 1/3 lb water soluble packets in 43.5 gals of water.	Cutworm Flea Beetle Green Peach Aphid Tobacco Aphid	1 lb	Apply 1 gal of spray solution for every 1,000 sq ft of bed. Apply evenly to ensure thorough coverage. For repeat applications use a minimum spray interval of 7 days.	
TRANSPLANT Apply in a minimum of 100 gals of transplant water per acre	Cutworm Flea Beetle Green Peach Aphid Potato Tuberworm Tobacco Aphid Tobacco Thrip	1 lb	Make transplant-water applications using mechanical transplant equipment only. Using such equipment, the insecticide/water mixture is mechanically applied directly into the soil along with the transplanted plants. Provides control for approximately 3 to 4 weeks after transplanting. For control late in the season, apply foliar sprays of <i>Orthene 75 S</i> .	

USE RESTRICTIONS:

Do not apply more than 1 lb *Orthene 75 S Soluble Powder* per acre as a transplant-water application as some phytotoxicity may occur.

FOLIAR By Ground: 10 to 50 galsproduct/A of spray By Air: Minimum of 3 galsproduct/A of spray	Grasshopper	1/3 to 2/3 lb	For repeat applications use a minimum spray interval of 3 days for application rates up to and including 2/3 lb/A and a minimum of 7 days for rates exceeding 2/3 lbproduct/A	3
	Flea Beetle Green Peach Aphid Hornworm Tobacco Thrips	2/3 lb		
	Stinkbugs Tobacco Aphid Vegetable Weevils	2/3 to 1 lb		
	Budworm Cabbage Looper Cutworm Japanese Beetle	1 lb		

continued

25/37

USE RESTRICTIONS

- Treat a maximum of 13 mounds per acre.
- Do not treat more than once per season.

TABLE 17. TOBACCO (Except CA) - (continued)

SOIL MOUND TREATMENT				3
DRENCH METHOD	Ants (excluding Carpenter and Pharaoh Ants*)	Mix one 1/3 lb water soluble packet in 26.7 gals water. [text above changes with size of water soluble packet. See below]	Apply 1 gal of mix to each mound area by sprinkling the mound until it is wet and treat a 4 foot diameter circle around the mound. Apply in the early morning or late afternoon, when ants are most active, for best results. Applications made under prolonged hot and dry conditions may be ineffective due to the location of the ants deep within the nest.	

[To be printed on 1/3 lb Size Water Soluble Packaging.]
Mix 1/3 lb in 26.6 gals of water

[To be printed on 1 lb Size Water Soluble Packaging.]
Mix 1 lb in 80 gals of water

[To be printed on 2 lb Size Water Soluble Packaging.]
Mix 1 lb in 160 gals of water

[To be printed on 2 1/2 lb Size Water Soluble Packaging.]
Mix 2 1/2 lb in 200 gals of water

[To be printed on 5 lb Size Water Soluble Packaging.]
Mix 1 lb in 400 gals of water

**TOBACCO
(Except CA)
[Soluble Powder Ant Use]**

USE RESTRICTIONS

- Do not apply more than 5 1/3 lbs *Orthene* 75 S (4 lbs ai) /A per season. This includes the use of *Orthene* in transplant water, plant bed, soil, float bed (greenhouse) and foliar applications.
- Treat a maximum of 13 mounds per acre.
- Do not treat more than once per crop cycle.

TOBACCO (Except CA) -

SOIL MOUND TREATMENT				
DRY METHOD	Ants (including Imported Fire Ants and Harvests Ants)	1 to 2 tsps	Evenly distribute over the mound. Apply in the early morning or late afternoon, when the ants are most active, for best results. Applications made under prolonged hot and dry conditions may be ineffective due to the location of the ants deep within the nest.	DAYS TO HARVEST

26/37

CONTAINER GROWN NURSERY STOCK

PLANTS	PESTS CONTROLLED	AMOUNT ORTHENE 75 S PER 100 GALS.	TIME OF APPLICATION	FURTHER APPLICATION INSTRUCTIONS
Container Grown Nursery Stock (Arborvitae, Azalea, Camellia, Rhododendron, Roses, Viburnum, Yew)	Black Vine Weevil, Strawberry Root Weevil	1 lb (16 oz)	Application should be made by mid-September for greenhouse stock and by mid-October for outdoor stock. Consult your local county extension agent for information on the identification and control of root weevils on ornamentals.	Apply the specified amount of <i>Orthene</i> 75 S per 100 gals of solution so as to thoroughly drench the root system.
	Ants (excluding Fire, Harvester, Carpenter and Pharaoh Ants)	1 lb (16 oz)	Apply as needed to control the pest.	

ORNAMENTAL TREES AND SHRUBS

USE RESTRICTIONS

- Do not exceed 21 1/3 oz of *Orthene* 75 S per acre per application.
- For foliar applications, do not apply with a low pressure handwand.
- Foliar applications for all trees except Flowering Crabapples and Douglas Fir must not be made more than once every 14 days. See "Further Application Instructions" for spray interval information regarding Flowering Crabapples and Douglas Fir.

PLANTS	PESTS CONTROLLED	AMOUNT ORTHENE 75 S PER 100 GALS	TIME OF APPLICATION	FURTHER APPLICATION INSTRUCTIONS
Trees and Shrubs (except Flowering Crabapple and Douglas Fir, see below).	Aphids Bagworms Birch Leafminer Tent Caterpillars* Lace Bugs Leafrollers	1/3 to 2/3 lb (5 1/3 to 10 2/3 oz)	As the insects begin to appear.	Apply the specified amount of <i>Orthene</i> 75 S in 100 gals water with a hydraulic sprayer. The addition of a suitable sticker improves control of Gypsy Moth larvae.
	Gypsy Moth Larvae* Webworms	2/3 lb (10.2/3 oz)	As the insects begin to appear.	*Mist blower application: Adjust rates to 1 1/3 lbs per 100 gals water for Gypsy Moth control and 1.0 lb per 100 gals water for Tent Caterpillar control.
	Scales (Crawlers)	2/3 lb (10 2/3 oz)	As crawlers begin to appear. Repeat applications, at a 2 week or more interval, may be necessary where there is continuous crawler production.	AMVAC does not advise application to Huckleberry, Balm of Gilead, Cottonwood, Lombardy Poplar and Viburnum suspensum as it may result in phytotoxicity in these plants. Nursery crops: Before treating large plantings, spray only a few plants and observe 2 weeks for phytotoxicity.
	Ponderosa Pine Needle Miner	2/3 lb (10 2/3oz)	Time of application is important. Consult your Farm Advisor or County Extension Agent.	Apply the specified amount of <i>Orthene</i> 75 S in 100 gals. water with a hydraulic sprayer as a full coverage spray .
	Grasshoppers	2/3 lb (10 2/3 oz)	As the grasshoppers begin to appear.	
	California Oakworm Cankerworms (Spring and Fall)	1/3 to 2/3 lb (5 1/3 to 10 2/3 oz)	As the insects begin to appear. Use the higher amount when the larger larvae are present.	Apply the specified amount of <i>Orthene</i> 75 S in 100 gals water with a hydraulic sprayer.
	Nantucket Pine Tip Moth Larvae	1 lb (16 oz)	Time of application is important. Consult your Farm Advisor or County Extension Agent. Repeat applications will be required for subsequent generations.	
	Root Weevil Adults	1 lb (16 oz)	Apply when first feeding damage occurs. Repeat applications, at 4 week intervals until the first heavy frost, may be necessary for complete foliage protection.	

TREES AND SHRUBS continued

PLANTS	PESTS CONTROLLED	AMOUNT ORTHENE 75 S PER 100 GALS.	TIME OF APPLICATION	FURTHER APPLICATION INSTRUCTIONS
Trees and Shrubs (except Flowering Crabapple and Douglas Fir, see below).	Box Elder Bugs Sawflies Budworms Leafhoppers	1 lb (16 oz)	As the insects begin to appear.	
	Japanese Beetle	1 1/3 lbs (21 1/3 oz)	As the Japanese Beetles begin to appear. Repeat applications, at 2 week intervals, may be necessary.	
	Elm Leaf Beetle (larvae)	1 1/3 lbs (21 1/3 oz)	As the larvae begin to appear. <i>Orthene</i> 75 S will not prevent Elm Leaf Beetle eggs from hatching.	
Douglas Fir (Christmas Trees)	Douglas Fir Needle Midge Douglas Fir Tussock Moth Larvae	2/3 lb (10.2/3 oz) (2/3 lbproduct/A)	Application should be made no more than 2 weeks prior to bud burst. For additional pest management information, consult your County Extension Service.	Apply the specified amount of <i>Orthene</i> 75 S in not less than 2 gals of spray per acre by air or in 100 gals of spray per acre by ground. Do not make more than 1 application per season.
Flowering Crabapples	Aphids Tent Caterpillars Leafrollers	1/3 lb (5 1/3 oz)	As the insects begin to appear.	Apply the specified amount of <i>Orthene</i> 75 S in 100 gals. water with a hydraulic sprayer. Do not apply more often than 3 times in a growing season at a 4 week interval. Caution: Phytotoxicity has occurred on the following Crabapple varieties: Hopa, Ichonoski, Malusfloribunda, Pink Perfection, Red Wine and Snow Cloud.

GOLF COURSE TURFGRASS

USE RESTRICTIONS

- Do not allow livestock to graze treated areas.
- Do not feed treated grass to livestock.
- Do not apply to turfgrass by air.
- Do not apply more than 5 1/3 lbs *Orthene 75 S* (4.0 lbs ai) /A per single application to Golf Courses.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3 lbproduct/A and a minimum of 7 days for rates exceeding 2/3 lbproduct/A.

PLANT	PESTS CONTROLLED	AMOUNT <i>ORTHENE 75 SPER</i> 1,000 SQ FT	TIME OF APPLICATION	FURTHER APPLICATION INSTRUCTIONS
Golf Course Turfgrass	Cutworm Fall Armyworm Yellow Striped Armyworm Southern Armyworm	1/2 to 1.2 oz (1 1/3 to 3 1/3 lbsproduct/A)	As the insects appear. A repeat application at 2 week intervals may be necessary.	Apply the specified amount of <i>Orthene 75 S</i> per 1,000 sq ft Use a minimum of 5 gals water per 1,000 sq ft to obtain good coverage.
	Chinch Bugs	1.2 to 2 oz (3 1/3 to 5 1/3 lbsproduct/A)	Apply as needed for adult population knockdown.(10 to 14 days).	Apply the specified amount of <i>Orthene 75 S</i> per 1,000 sq ft Use 1 to 15 gals water per 1,000 sq ft to obtain good coverage.
	Sod Webworm	1/2 to 1 oz. (1 1/3 to 2 2/3 lbsproduct/A)	As sod webworms begin to appear. Use the higher amount when quick knockdown is needed or with heavy infestations. Repeat application may be necessary. Do not repeat at more than 1 week intervals.	
	Leafhopper	1 oz (2 2/3 lbsproduct/A)	As the leafhoppers begin to appear. A repeat application at 1 week intervals may be necessary.	

continued

GOLF COURSE TURFGRASS - continued

Golf Course Turfgrass	Mole Crickets (except CA) Spittlebug (except CA)	1 to 2 oz (2 2/3 to 5 1/3 lbsproduct/A)	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 <i>Orthene</i> 75 S 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. The use of a lemon fragrance substance in the spray mix may enhance control by acting as a flushing agent and thus provide increased Mole Cricket contact with the <i>Orthene</i> 75 S. The following lemon scented products have been shown to be effective flushing agents: Lemon Joy, Lemon Palmolive and Mighty Myrt Products Manufacture - Base Pure Lemon Fragrance. The use rate for these lemon scented products is 2 tpsps per gal water for small total mix volumes or 6 fl oz per 50 gals water for large total mix volumes.
	Greenbug (Schizaphis grami.nun) Grasshoppers	1/2 oz (1 1/3 lbsproduct/A)	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 <i>Orthene</i> 75 S. Use 4 gals water per 1,000 sq ft to obtain good coverage. Do not mow turfgrass for at least 24 hours after application
	Black Turfgrass Ataenius (except CA)	1.5 to 2 oz (4 to 5 1/3 lbsproduct/A)	Apply when insects or their damage first appear.	Apply the specified Amount of <i>Orthene</i> 75 S per 1,000 sq ft Use a minimum of 5 gals water per 1000 sq ft Irrigate lightly after application (not more than 1/2 inch). Use the higher rate for severe infestations.

31/37

SOD FARM TURFGRASS

USE RESTRICTIONS

- Do not allow livestock to graze treated areas.
- Do not feed treated grass to livestock.
- Do not apply to turfgrass by air.
- Do not apply more than 4 lbs *Orthene* 75 S (3.0 lbs ai) /A per single application to Sod Farms.
- Allow at least 3 days between last application and harvesting of sod.

PLANT	PESTS CONTROLLED	AMOUNT ORTHENE 75 SPER 1,000 SQ FT	TIME OF APPLICATION	FURTHER APPLICATION INSTRUCTIONS
Sod Farm Turfgrass	Cutworm Fall Armyworm Grasshopper Greenbug Leafhopper Sod Webworm Southern Armyworm Yellow Striped Armyworm	1/2 to 1 1/3 oz (1 1/3 to 3 1/3 lbsproduct/A)	As the insects appear. A repeat application at 2 week intervals may be necessary.	Apply the specified amount of <i>Orthene</i> 75 S per 1,000 sq ft Use a minimum of 5 gals water per 1,000 sq ft to obtain good coverage.
	Chinch Bugs Mole Cricket (except CA) Spittlebug (except CA)	1 1/3 to 1 1/2 oz (3 1/3 to 4 lbsproduct/A)	Apply as needed for adult population knockdown (10 to 14 days).	Apply the specified amount of <i>Orthene</i> 75 S per 1,000 sq ft Use 1 to 15 gals water per 1,000 sq ft to obtain good coverage. Do not apply more than 4 lbsproduct/A in a single application.
	Sod Webworm	1/2 to 1 oz (1 1/3 to 2 2/3 lbsproduct/A)	As sod webworms began to appear. Use the higher amount when quick knockdown is needed or with heavy infestations. Repeat application may be necessary. Do not repeat at more than 1 week intervals.	

MOUND TREATMENT OF FIRE ANTS AND HARVESTER ANTS IN TURFGRASS

PLANT	PESTS CONTROLLED	AMOUNT ORTHENE 75 S	TIME OF APPLICATION	FURTHER APPLICATION INSTRUCTIONS
Turfgrass Residential, Recreational, and Commercial Turf	Imported Fire Ants and Harvester Ants	Drench Method: Mix 1/3 lb in 26.6 gals water Apply 1 gal of mix to each mound area by sprinkling the mound until it is wet and treat a 4 ft 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 within the nest, ineffective due to the location of the ants deep	Apply the specified amount of <i>Orthene 75 S</i> as directed. Grass in treated areas may be injured. Do not treat mound more than once per season.

MOUND TREATMENT OF FIRE ANTS AND HARVESTER ANTS IN TURFGRASS

[Soluble Powder Ant Use]

USE RESTRICTIONS

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.

PLANTS	PESTS CONTROLLED	AMOUNT ORTHENE 75 S	TIME OF APPLICATION	FURTHER APPLICATION INSTRUCTIONS
Turfgrass Residential, Recreational and Commercial Turf	Imported Fire Ants and Harvester Ants	Mound Treatment – Dry Method: Evenly distribute 1 to 2 tpsps over 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 <i>Orthene 75 S</i> as directed. Grass in treated areas may be injured. Do not treat mound more than once per season.

OUTDOOR AND PERIMETER SPRAY

USE RESTRICTIONS

- Do not apply with a low pressure handwand.
- Do not use on residential turfgrass.

LOCATION	PESTS CONTROLLED	AMOUNT ORTHENE 75 S PER GALLON	TIME OF APPLICATION	FURTHER APPLICATION INSTRUCTIONS
Outdoor and Perimeter Area	Wasps	Mix 1/3 lb in 3.3 gals water	Treat early or late in the day, as wasp are generally less active during these times.	Apply as a spot treatment to the nest, nest entrance, and surrounding areas where the wasps alight.
	Ants (excluding Fire Ants, Harvester Ants, Carpenter Ants and Pharaoh Ants) Cockroaches Crickets Earwigs Pillbugs	Mix 1/3 lb in 3.3 gals water	As the insects appear.	Apply to a band of soil 6 to 10 ft adjacent to the structure and to a height of 2 to 3 ft on the foundation where pests may be active or may find entrance. Also apply as a residual spray or with a paint brush to surfaces of buildings, window frames, shutters, entryways, screens, eaves, patios, garages, carports, around garage areas and other areas where these pests congregate.

ORNAMENTAL PLANTS GROWN FOR CUT FLOWER PRODUCTION

USE RESTRICTIONS

- Do not apply more than 1 1/3 lb *Orthene 75 S* /A of per 100 gals water.
- Do not exceed 1 lb product/A *Orthene 75 S* for cut flowers.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 0.5 lbs aproduct/A and 7 days for application rates greater than 0.5 lbs aproduct/A.

PLANTS	PESTS CONTROLLED	AMOUNT ORTHENE 75 S PER 100 GALS	TIME OF APPLICATION	FURTHER APPLICATION INSTRUCTIONS
Chrysanthemums Daises Gladioli Roses	Aphids Lygus Thrips	2/3 lb (10 2/3 oz)	As insects begin to appear. Repeat applications may be necessary.	Apply the specified amount of <i>Orthene 75 S</i> in 100 gals water with a hydraulic sprayer as a full coverage spray. DO NOT EXCEED 16 OZ PER ACRE. Multiple applications may cause slight tip burn or marginal leaf necrosis on some varieties. Test on a few plants to determine varietal susceptibility.

**GREENHOUSE (Commercial only) AND OUTDOOR ORNAMENTAL PLANTS,
FLORAL CROPS, GROUND COVERS AND FOLIAGE PLANT CROPS
Plants Not Produced for Cut Flower Production**

USE RESTRICTIONS

- Not for residential greenhouse use.
- Do not apply more than 1 1/3 lb *Orthene* 75 S /A per 100 gals water.
- Do not apply with low pressure handwand.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 2/3lb product /A and a minimum of 7 days for rates exceeding 2/3 lb product /A.
- 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.

PLANTS	INSECTS CONTROLLED	AMOUNT ORTHENE 75 S PER 100 GALS	TIME OF APPLICATION	FURTHER APPLICATION INSTRUCTIONS
Chrysanthemums	Aphids Thrips	2/3 lb (10 2/3 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 <i>Orthene</i> 75 S in 100 gals water with a hydraulic sprayer as a full coverage spray. Do not exceed 21 1/3 oz of product per acre. Do not apply more often than once every 28 days to 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 2 weeks for varietal phytotoxicity. Application to Chrysanthemums in flower may cause flower damage.

continued

35/37

GREENHOUSE (Commercial Only) AND OUTDOOR ORNAMENTAL PLANTS, FLORAL CROPS, GROUND COVERS AND FOLIAGE PLANT CROPS (Plants Not Produced for Cut Flower Production) continued

PLANTS	INSECTS CONTROLLED	AMOUNT ORTHENE 75 S PER 100 GALS.	TIME OF APPLICATION	FURTHER APPLICATION INSTRUCTIONS
Floral Crops Dahlias Daisies Easter Lily Gladioli <i>Gypsophila</i> Pachysandra Pansy Peony Sedum Statice Strawflower Yarrow Zinnia Foliage Plants Anthuriums Cacti Orchids Poinsettia	Aphids	1/3 to 2/3 lb (5 1/3 to 10 2/3 oz)	As aphids begin to appear.	Apply the specified amount of <i>Orthene</i> 75 S in 100 gals water with a hydraulic sprayer as a full coverage spray. Do not exceed 21 1/3 oz of <i>Orthene</i> 75 S per acre. The addition of a wetting agent may be required on difficult to wet foliage Caution: Phytotoxicity has occurred on the following foliage plants: <i>Blechnum gibbum</i> , <i>Cissus antarctica</i> , <i>Ficus triangularis</i> , <i>Fittonia verschoffelti</i> , <i>Maranta leuconeura kerchoviana</i> , <i>Pachystachya lutea</i> , <i>Plectranthus australis</i> , <i>Polypodium aureus</i> , <i>Polystichum</i> , <i>Pteris ensiformis</i> , <i>Tolmiea menziesii</i> . Before treating large plantings spray only a few plants and observe 2 weeks for varietal phytotoxicity. Application of <i>Orthene</i> 75 S on Poinsettias after bract formation may result in phytotoxicity on certain varieties.
	Mealybugs Thrips Whiteflies Scales (Crawlers)	2/3 lb (10 2/3 oz)	Mealybugs and Whitefly: As the insects begin to appear. A repeat application, at a 2 week interval, may be necessary for control of mealybugs and whiteflies. Scale: As crawlers begin to appear. Repeat applications, at a 2 week or more interval, may be necessary where there is continuous crawler production	
	Sweetpotato Whiteflies (except CA)	1/3 lb (5 1/3 oz) + <i>Tame</i> ® 2.4 EC Spray 10 2/3 fl oz (0.2 lb ai)	Apply when insects first appear. If a population is well established, make 1 application of the tank mix and follow 5 to 7 days later with <i>Tame</i> 2.4 EC alone at 16 fl. oz. per 100 gals water. See <i>Tame</i> 2.4 EC label for instructions.	
Roses	Aphids Leafrollers Thrips	2/3 to 1 lb (10 2/3 to 16 oz)	As leafrollers begin to appear. Use the higher amount when the large larvae are present.	Apply the specified amount of <i>Orthene</i> 75 S in 100 gals water with a hydraulic sprayer as a full coverage spray. Do not exceed 21 1/3 oz of <i>Orthene</i> 75 S per acre. Application to Roses in flower may result in flower damage.

36/37

**NON-CROP AREAS
[ANT MOUND TREATMENT]**

CROPS	PESTS CONTROLLED	AMOUNT ORTHENE 75 S PER ACRE	FURTHER APPLICATION INSTRUCTIONS
Non-Crop Areas	Imported Fire Ants and Harvester Ants	Mound Treatment – Drench Method: Mix 1.0 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 4 ft 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 areas may be injured. Do not treat mound more than once per season.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment.

PESTICIDE 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 1-888-462-6822.

Pesticide Disposal: To avoid wastes, use all materials in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

CONTAINER DISPOSAL

Outer Bag [For Multiple packaging]: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or dispose of the empty outer bag in the trash as long as WSP is unbroken.
 Packet [For single packaging]: Offer for recycling if available or dispose of the empty packet in the trash as long as WSP is unbroken.

(CONTAINER DISPOSAL FOR HOPPER BOX AND ANT TREATMENT USES)

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.

37/27

LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use, subject to the inherent risks referred to herein, when it is used in accordance with such directions; and (c) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions.

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