

ORTHENE[®] TURF, TREE & ORNAMENTAL WSP

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 For Transportation Emergencies, including spill, leak or fire, phone: CHEMTREC[®].....1-800-424-9300 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


 4100 E. Washington Blvd.
 Los Angeles, CA 90023 U.S.A.
 1-888-462-6822

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 approval 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 are 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 Turf, Tree & Ornamental WSP. 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 Turf, Tree & Ornamental WSP. 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 Turf, Tree & Ornamental WSP into

spray tank.

PREPARATION OF SPRAY SOLUTION

To prepare spray solution, drop the unopened packet(s) of Orthene Turf, Tree & Ornamental WSP 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 Orthene Turf, Tree & Ornamental WSP	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 Orthene Turf, Tree & Ornamental WSP 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 Orthene Turf, Tree & Ornamental WSP		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

USE INFORMATION

Orthene Turf, Tree & Ornamental WSP is an insecticide for control of pests on selected agricultural crops and in certain non-crop areas. The active ingredient in Orthene Turf, Tree & Ornamental WSP 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 Turf, Tree & Ornamental WSP through ingestion than by contact. Application of Orthene Turf, Tree & Ornamental WSP 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. Do not apply this product as an ultralow (ULV) spray, or in any carrier other than water].
- 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.

CONTAINER GROWN NURSERY STOCK

PLANTS	PESTS CONTROLLED	AMOUNT ORTHENE TURF, TREE & ORNAMENTAL WSP 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 Orthene Turf, Tree & Ornamental WSP 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 Turf, Tree & Ornamental WSP 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 TURF, TREE & ORNAMENTAL WSP 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 Orthene Turf, Tree & Ornamental WSP in 100 gals. water with a hydraulic sprayer. The addition of a suitable sticker improves control of Gypsy Moth larvae. *Mist blower application: Adjust rates to 1 1/3 lbs. per 100 gals. of water for Gypsy Moth control and 1.0 lb. per 100
	Gypsy Moth Larvae* Webworms	2/3 lb. (10 2/3 oz.)	As the insects begin to appear.	

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.	gals. water for Tent Caterpillar control. 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 Orthene Turf, Tree & Ornamental WSP in 100 gals. of 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 Orthene Turf, Tree & Ornamental WSP in 100 gals. of 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.	Apply the specified amount of Orthene Turf, Tree & Ornamental WSP in 100 gals. of water with a hydraulic sprayer as a full coverage spray.

TREES AND SHRUBS continued

PLANTS	PESTS CONTROLLED	AMOUNT ORTHENE TURF, TREE & ORNAMENTAL WSP 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. Orthene Turf, Tree & Ornamental WSP 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 lb. product/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 Orthene Turf, Tree & Ornamental WSP 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 Orthene Turf, Tree & Ornamental WSP in 100 gals. of 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 Turf, Tree & Ornamental WSP (4.0 lbs. a.i.)/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 lb. product/A and a minimum of 7 days for rates exceeding 2/3 lb. product/A.

PLANT	PESTS CONTROLLED	AMOUNT ORTHENE TURF, TREE & ORNAMENTAL WSP PER 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 lbs. product/A)	As the insects appear. A repeat application at 2 week intervals may be necessary.	Apply the specified amount of Orthene Turf, Tree & Ornamental WSP per 1,000 sq. ft. Use a minimum of 5 gals. of water per 1,000 sq. ft. to obtain good coverage.
	Chinch Bugs	1.2 to 2 oz. (3 1/3 to 5 1/3 lbs. product/A)	Apply as needed for adult population knockdown (10 to 14 days).	Apply the specified amount of Orthene Turf, Tree & Ornamental WSP per 1,000 sq. ft. Use 1 to 15 gals. of water per 1,000 sq. ft. to obtain good coverage.
	Sod Webworm	1/2 to 1 oz. (1 1/3 to 2 2/3 lbs. product/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 lbs. product/A)	As the leafhoppers begin to appear. A repeat application at 1 week intervals may be necessary.	

Golf Course Turfgrass	Mole Crickets (except CA) Spittlebug (except CA)	1 to 2 oz. (2 2/3 to 5 1/3 lbs. product/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 Orthene Turf, Tree & Ornamental WSP 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 Orthene Turf, Tree & Ornamental WSP. 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 tsps. per gal water for small total mix volumes or 6 fl. oz. per 50 gals. water for large total mix volumes.
	Greenbug (Schizaphis graminun) Grasshoppers	1/2 oz. (1 1/3 lbs. product/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 Orthene Turf, Tree & Ornamental WSP. 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.
	Black Turfgrass Ataenius (except CA)	1.5 to 2 oz. (4 to 5 1/3 lbs. product/A)	Apply when insects or their damage first appear.	Apply the specified Amount of Orthene Turf, Tree & Ornamental WSP per 1,000 sq. ft. Use a minimum of 5 gals. of water per 1000 sq. ft. Irrigate lightly after application (not more than 1/2 inch). Use the higher rate for severe infestations.

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 Turf, Tree & Ornamental WSP (3.0 lbs a.i.)/A per single application to sod farms.
- Allow at least 3 days between last application and harvesting of sod.

PLANT	PESTS CONTROLLED	AMOUNT ORTHENE TURF, TREE & ORNAMENTAL WSP PER 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 lbs. product/A)	As the insects appear. A repeat application at 2 week intervals may be necessary.	Apply the specified amount of Orthene Turf, Tree & Ornamental WSP per 1,000 sq. ft. Use a minimum of 5 gals. of 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 lbs. product/A)	Apply as needed for adult population knockdown (10 to 14 days).	Apply the specified amount of Orthene Turf, Tree & Ornamental WSP per 1,000 sq. ft. Use 1 to 15 gals. of water per 1,000 sq. ft. to obtain good coverage. Do not apply more than 4 lbs. product/A in a single application.
	Sod Webworm	1/2 to 1 oz. (1 1/3 to 2 2/3 lbs. product/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.	

MOUND TREATMENT OF FIRE ANTS AND HARVESTER ANTS IN TURFGRASS

PLANT	PESTS CONTROLLED	AMOUNT ORTHENE TURF, TREE & ORNAMENTAL WSP	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 ineffective due to the location of the ants deep within the nest.	Apply the specified amount of Orthene Turf, Tree & Ornamental WSP 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 TURF, TREE & ORNAMENTAL WSP 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 lbs. Orthene Turf, Tree & Ornamental WSP /A per 100 gals water.
- Do not exceed 1 lb. product/A for cut flowers.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including 0.5 lb. product/A and 7 days for application rates greater than 0.5 lb. product/A.

PLANTS	PESTS CONTROLLED	AMOUNT ORTHENE TURF, TREE & ORNAMENTAL WSP PER 100 GALS.	TIME OF APPLICATION	FURTHER APPLICATION INSTRUCTIONS
Chrysanthemums Daisies 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 Orthene Turf, Tree & Ornamental WSP in 100 gals. of 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 lbs. Orthene Turf, Tree & Ornamental WSP /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 TURF, TREE & ORNAMENTAL WSP 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.	<p>Apply the specified amount of Orthene Turf, Tree & Ornamental WSP in 100 gals. of water with a hydraulic sprayer as a full coverage spray.</p> <p>Do not exceed 21 1/3 oz. of product per acre.</p> <p>Do not apply more often than once every 28 days to Chrysanthemums.</p> <p>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.</p> <p>Before treating large Chrysanthemum plantings, spray only a few plants and observe 2 weeks for varietal phytotoxicity.</p> <p>Application to Chrysanthemums in flower may cause flower damage.</p>

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

PLANTS	INSECTS CONTROLLED	AMOUNT ORTHENE TURF, TREE & ORNAMENTAL WSP 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 Orthene Turf, Tree & Ornamental WSP in 100 gals. of water with a hydraulic sprayer as a full coverage spray. Do not exceed 21 1/3 oz. of Orthene Turf, Tree & Ornamental WSP 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 verschaaffeltii</i> , <i>Maranta leuconeura kerchoveana</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 Orthene Turf, Tree & Ornamental WSP 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.) + Tame® 2.4 EC Spray 10 2/3 fl oz. (0.2 lb. a.i.)	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 Tame 2.4 EC alone at 16 fl. oz. per 100 gals. water. See Tame 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 Orthene Turf, Tree & Ornamental WSP in 100 gals. water with a hydraulic sprayer as a full coverage spray. Do not exceed 21 1/3 oz. of Orthene Turf, Tree & Ornamental WSP per acre. Application to roses in flower may result in flower damage.

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

CROPS	PESTS CONTROLLED	AMOUNT ORTHENE TURF, TREE & ORNAMENTAL WSP 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 a 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.

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.

THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE SET FORTH HEREIN. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE, TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF QUALITY OR PERFORMANCE. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL

CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW MANUFACTURER OR SELLER SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

AMVAC offers this product, and Buyer accepts it, subject to the foregoing Limited Warranty which may be varied only by agreement in writing signed by an authorized representative of AMVAC.

© 2015 AMVAC Chemical Corporation. All Rights Reserved. AMVAC and the Beaker logo are U.S. registered trademarks owned by AMVAC Chemical Corporation. Chemtec is a trademark of the American Chemistry Council, Inc. *Orthene* is a registered trademark of OMS Investments, Inc.

AMVAC Chemical Corporation
4100 E. Washington Boulevard
Los Angeles, CA 90023 U.S.A.
1-888-462-6822