

CM 12 499-270 1/19

Front Panel:

10/24/89

**WHITMIRE 1-12 INSECTICIDE**

Controls numerous pests.

**ACTIVE INGREDIENTS:**

Chlorpyrifos [0,0-diethyl 0-(3,5,6-trichloro-2-pyridyl) phosphorothioate] . . . . . 12.6%

**INERT INGREDIENTS:**

. . . . . 87.4%

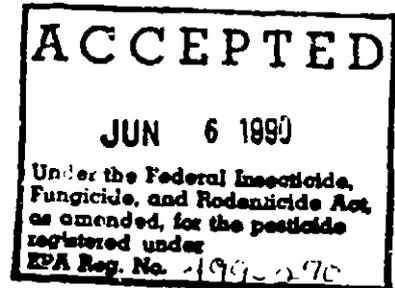
Contains 1 pound of chlorpyrifos per gallon.

Contains petroleum distillate.

**KEEP OUT OF REACH OF CHILDREN**

**WARNING**

**PRECAUTIONARY STATEMENTS**



**Hazards to Humans and Domestic Animals**

**MAY CAUSE IRREVERSIBLE EYE DAMAGE -- HARMFUL IF SWALLOWED -- HARMFUL IF ABSORBED THROUGH SKIN -- MAY CAUSE SKIN IRRITATION**

**Do not get in Eyes, On Skin Or Clothing -- Wear Eye Protection -- Avoid Breathing Vapors And Spray Mist -- handle Concentrate in A Ventilated Area -- Wash Thoroughly With Soap And Water After Handling and Before Eating or Smoking -- Remove Contaminated Clothing and Wash Before Reuse -- Keep Away From Food, Feedstuffs and Water Supplies -- Keep Children and Pets Out of Treated Areas Until These Areas are Dry.**

**STATEMENT OF PRACTICAL TREATMENT**

**If Swallowed:** Call a physician or Poison Control Center immediately. Do not induce vomiting. Contains an aromatic petroleum solvent. Do not give anything by mouth to unconscious person.

**If On Skin:** Immediately wash with plenty of soap and water. Get medical attention.

**If In Eyes:** Flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

**If Inhaled:** Remove to fresh air if symptoms of cholinesterase inhibition appear and get medical attention immediately.

**Note to Physician:** Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. Atropine, only by injection is the preferable antidote.

Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine.

**PHYSICAL OR CHEMICAL HAZARDS**

**COMBUSTIBLE**

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**Do Not Use or Store Near Heat or Open Flame  
Do Not Cut or Weld Container**

**Environmental Hazards**

aquatic organisms. Do not apply directly to water. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Cover or incorporate spills. Do not contaminate water by cleaning of equipment or disposal of waste.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

473.2 ml/16 fl. oz.

EPA Reg. No. 499-270

EPA Est. No. 499-MO-1

**DIRECTIONS FOR USE**

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

**GENERAL INFORMATION**

Whitmire 1-12 insecticide is an emulsifiable concentrate designed for use as a spray to control various pests injurious to trees, turf and ornamental plants. The pests controlled are listed in the accompanying tables. Whitmire 1-12 is compatible with insecticides, miticides, and fungicides commonly recommended except for alkaline materials such as Bordeaux mixture and lime. A small amount of spray mixture should be prepared to check for compatibility before a large volume of spray is mixed.

**Attention:** Do not allow adults, children or pets on treated areas until spray has dried. Keep out of fishpools and other bodies of water. Do not treat vegetable gardens. Do not allow livestock to graze in treated areas. Do not feed treated grass cuttings (hay) or seed screenings to livestock nor use hay for livestock bedding. Do not use in poultry houses.

**TURF AND OTHER OUTDOOR USES**

Use Whitmire 1-12 to control the pests listed in the following table by application at the recommended dosage and in accordance with the directions given below. Dilute Whitmire 1-12 in water and apply as a coarse, low-pressure spray using suitable application equipment. Use one gallon of diluted spray per 1,000 sq. ft. of area.

Hose-end sprayer directions for 8 fl. oz. size for control of fleas and ticks. Apply one 8 oz. bottle to cover 3,000 square feet.

1. Add 8 fl. oz. of water to the 1-12 insecticide container (fill up to line) and shake well.
2. Attach siphonage tube to hose-end sprayer attachment.
3. Screw hose into hose-end sprayer attachment.
4. Insert sprayer attachment into 1-12 insecticide container and securely tighten.
5. Turn water on to start flow of insecticide. Turn sprayer attachment to "on" position. Hold approximately three feet above area to be treated, moving at a steady pace to ensure consistent coverage.
6. To stop flow of insecticide, turn sprayer to "off" position.

NOTE: To ensure adequate coverage use moderate to high water pressure.

Thoroughly water immediately after treatment to wash the insecticide into the turf, except as noted. For best results, the lawn should be moist at time of treatment. Spray when pest first appears; retreat when needed.

Pest*	Amount of Whitmire 1-12 in water to make 1 gal.	Specific Directions
Ticks (such as American dog, cattle fever, Gulf coast, lone star)(1) brown)(2)	1 fl. oz.	<ol style="list-style-type: none"> <li>1. For control of ticks, infesting corrals, stockyards, holding pens and other outdoor livestock areas. Treat soil in corrals and pens, especially in corners, under feeders and shelters and other areas likely to serve as harborage sites for ticks that have removed themselves from their host. Spray surfaces to be treated until wet, but do not create excessive runoff.</li> </ol> <p>NOTE: This application is intended as a premise spray only. Do not use as a direct spray on livestock. Take care to avoid creating mist or drift which may come into contact with feed, water or livestock. Livestock should not be allowed in treated areas until spray deposits have dried.</p>
Pest*	Amount of Whitmire 1-12 per 1000 sq. ft.	Specific Directions
Ants (including foraging fire ants) Armyworm (Such as: Beet, Fall, Yellow-striped) Centipedes Chiggers(1) Chinch bugs Clover mites Cutworms Crickets Earwigs Fiery skipper Fire ants (mounds)(2) Fleas Gnats Grasshoppers Greenbugs June beetles Leafhoppers Lucerne moth Millipedes Mites (Such as: Clover, Formula grass, Winter grain) Mosquitoes(3) Sod webworm(4)(lawn moths) Sowbugs Springtails Ticks(1)	3 fl. oz.	<ol style="list-style-type: none"> <li>1. Use Whitmire 1-12 insecticide for area control of Ticks and Chiggers infesting non-cropland areas such as roadsides, footpaths, and trails, picnic and camping sites, parks and other recreational areas where these pests are present and create a nuisance or a possible public health problem. Do not allow use of treated areas during application or until spray has dried. Apply Whitmire 1-12 in water at the rate of 1/2 pint per acre (equivalent to 2 fl. oz. per 2,700 sq. ft.) using a hydraulic sprayer, mist applicator, knapsack sprayer, or other suitable hand or power-operated spray equipment. Treat low underbrush, grassy areas, weeds, and ground surface and debris using enough spray volume to obtain thorough coverage, usually 40 to 100 gallons per acre.</li> <li>2. For individual fire ant mounds, apply Whitmire 1-12 as a drench, diluted at the rate of 1 fl. oz. (30 ml) per 1 gallon of water. Gently sprinkle a total of 1 gallon of the diluted emulsion over the surface of each mound using a gentle spray (such as a sprinkler can). Thoroughly wet mound and surrounding area to a 4 ft. diameter (12 sq. ft.). For best results, apply in cool weather, 65-80°F. or in early morning or late evening hours. Treat new mounds as they appear. Pressurized sprays may disturb the ants and cause migration, reducing product effectiveness.</li> <li>3. Mosquitoes coming to rest on areas treated for control of turf pests will be killed for varying periods of time after treatment, depending on exposure of treated areas to weathering conditions.</li> <li>4. For sod webworms delay watering or mowing the treated area for 12 to 24 hours after treatment.</li> </ol>
European crane fly	4 fl. oz.	
Turfgrass weevil ( <i>Hypodamia</i> )(1)	6 fl. oz.	<ol style="list-style-type: none"> <li>1. Spray suspected problem areas in mid-April and again in mid-May or as recommended by your Local Agricultural Extension Service Specialist.</li> </ol>
White grubs (Such as: Black turfgrass stemius, European chafer, Southern masked chafer, and Japanese beetle larvae)(1)	6 to 12 fl. oz.	<ol style="list-style-type: none"> <li>1. For white grubs, spray when grubs are young and actively feeding near the soil surface, usually during late July and August or as recommended by your local Agricultural Extension Service Specialist. Immediately after spraying, irrigate the treated area with 1/2 to 1 inch of water to wash the insecticide into the underlying soil.</li> </ol>
Bluegrass billbugs(1)	3 to 12 fl. oz.	<ol style="list-style-type: none"> <li>1. For bluegrass billbugs spray early in the season when adults first appear. Retreat as needed.</li> </ol>

\*Numbers in parentheses refer to Specific Directions.

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**PEST CONTROL ON OUTSIDE SURFACES AND AROUND BUILDINGS**

Apply Whitmire 1-12 as a residual spray to outside surfaces of buildings including porches, window frames, eaves, patios, garages, refuse dumps and other areas where pests congregate or have been seen. Repeat treatment as needed to maintain effectiveness.

Pest*	Amount of Whitmire 1-12 in water to make 1 gal.	Specific Directions
Ants Bees Carpenter Ants Clover mites Cockroaches Crickets Earwigs Fleas Flies Hornets Millipedes Mosquitoes Scorpions(2) Silverfish Sowbugs Spiders Ticks Wasps Yellowjackets	For band treatment(1) 1/3 fl. oz. <hr/> On Outside Surfaces 5 1/3 fl. oz.	1. To help prevent infestation of buildings treat a band of soil 6 to 10 feet wide around and adjacent to buildings, also the building foundation to a height of 2 to 3 feet, where pests are active and may find entrance. Use 4 fluid ounces of Whitmire 1-12 per 50 gallons of water and apply as a coarse spray at the rate of about 10 gallons spray mixture per 1,000 sq. ft. to thoroughly and uniformly wet the band area.  2. For scorpions treat or remove accumulations of lumber, firewood, and other materials which serve as insect harborage sites.

\*Number in parentheses refer to Specific Directions.

**ORNAMENTALS (SOIL TREATMENT)**

Use Whitmire 1-12 insecticide to treat potted, containerized, and balled and burlapped nursery stock to control the insects in the soil attached to the roots of these plants. Completely submerge the ball of soil in a tank containing diluted Whitmire 1-12 insecticide. Do not remove burlap wrap or plastic containers with drain holes prior to submerging. Keep soil submerged until complete saturation has occurred, normally about 30 seconds. Note: Wear rubber gloves, boots, and apron during this operation. Application should be made in a well-ventilated area. Note: Environmental factors significantly affect phytotoxicity. Whitmire 1-12 has been tested on numerous ornamental plants without causing serious phytotoxicity. However, because of the numerous varieties grown, it is recommended that a small group of plants be treated at the recommended rate under the anticipated growing conditions and observed for phytotoxic symptoms for at least 7 days before a large number of plants are treated.

Pest*	Amount of Whitmire 1-12 in water to make 1 gal.	Specific Directions
Fire Ants(1)	1 fl. oz.	1. An alternate treatment to submerging potted plants is to dilute 4 oz. of Whitmire 1-12 insecticide in 100 gals. of water. This dilution should be applied to the point of runoff on a twice-daily schedule for three consecutive days. Do not remove burlap wrap or container from plants prior to treatment.
Grubs Weevils	2 3/4 fl. oz.	

\*Number in parentheses refer to Specific Directions

**ORNAMENTALS (OUTDOOR AND NURSERY)**

Use Whitacre 1-12 insecticide to treat flowers, shrubs, evergreens, vines, shade and flowering trees found to be infested with pests listed in the following table. Dilute Whitacre 1-12 with water according to directions given in the table and apply using suitable hand or power-operated spray equipment in a manner to provide complete and uniform coverage. For best results apply a coarse spray to thoroughly wet both upper and lower leaf surfaces and infested limb and trunk areas. Attempt to penetrate dense foliage but avoid overspraying to the point of excessive runoff. Treat when pests appear and repeat at 7 to 20 day intervals, if needed. Consult your State Agricultural Experiment Station or Extension Service Specialist for application timing and other specific use information.

Note: Ornamentals: Environmental factors have significant effects on phytotoxic expression. Whitacre 1-12 has been tested on numerous ornamental plants without causing serious phytotoxicity. However, do not use on azaleas, camellias, poinsettias, rose bushes, or variegated ivy because of possible injury to these plants.

Pest*	Amount of Whitacre 1-12 in water to make 1 gal.	Specific Directions
Adelgids (Such as: Cooley and Eastern spruce galls, Pine bark) Ants (including foraging fire ants) Aphids (Such as: Apple, Chrysanthemum, Cottonwood, Elm leaf, Peach, Rose, Spiraea, Woolly) Armyworms (Such as: Fall, Yellowstriped) Bagworms(1) Boxelder bugs Cankerworms Catalpa sphinx Chiggers Citrus mealybugs Cockroaches (Such as: American, Brown-banded, German, Oriental, Smokey brown) Elm spanworm Fall webworm Grasshoppers Green fruitworm Hornworms Jackpine budworm Juniper webworm Katydid Lace bugs Leafhoppers Leafrollers(2) Maple leafcutter(3) Mites (Such as: Clover, Red spider, Southern red)(4) Oleander caterpillar Orange tortrix Periodical cicada Plant bugs Poplar tentmaker Psyllid Puss caterpillar Rose chafer Sawflies, exposed (Such as: Pine, Pin oak, Redheaded) Sowbugs Spittlebugs Spruce budworm Tent caterpillars (Such as: Eastern, Forest, Western) Thornbug Walnut caterpillar Western spruce budworm Whiteflies Yellownecked caterpillar	1/3 fl. oz.	1. For bagworms treat when insects are in the crawler stage. 2. For effective control of leafrollers spray should be applied before leaves are tightly rolled. 3. For effective control of maple leafcutter on maple trees apply spray to larvae as cases are being formed. Do not treat sugar maple trees intended for maple syrup production. 4. For effective control of spider mites when large numbers of eggs are present, apply a second spray 3 to 5 days in the South or 7 to 10 days in the North after initial treatment to control newly-hatched nymphs.

\*Number in parentheses refer to Specific Directions.

Pest*	Amount of Whitmire 1-12 in water to make 1 gal.	Specific Directions
<p>Armyworms (Beet)</p> <p>Beetles (Fuller rose, Native elm bark)(1)</p> <p>Cutworms</p> <p>Leafhoppers</p> <p>Mahogany webworm</p> <p>Mealybugs</p> <p>Mimosa webworm</p> <p>Moths (Such as: Browntail, Cypress tip, Douglas fir tussock, European pine shoot, Gypsy (2), Holly bud, Nantucket pine tip, Padock, Pitch pine tip, Subtropical pine tip, Tussock)</p> <p>Oakworms (Such as: California, Orange-striped, Redhumped)</p> <p>Redhumped caterpillar</p> <p>Thrips (exposed)</p> <p>Weevils (Such as: Blackvine (3), Yellow Poplar, Pine reproduction)</p>	<p>2/3 fl. oz.</p>	<ol style="list-style-type: none"> <li>To reduce twig and branch feeding by bark beetles applications should be made in the spring or early summer.</li> <li>To kill migrating and invading gypsy moth larvae treat trunks and foliage.</li> <li>Blackvine weevils are night feeders. Late afternoon spraying will give control in some areas.</li> </ol>
<p>Beetles (Such as: Cottonwood leaf (1), Elm leaf, Flea, Willow leaf)</p>	<p>2/3 to 1 1/3 fl. oz.</p>	<ol style="list-style-type: none"> <li>For cottonwood leaf beetles use Whitmire 1-12 in water to control larvae and adults infesting cottonwoods. Make the treatment when field counts indicate damaging beetle populations are developing or present.</li> </ol>
<p>Borers(1): Clearwing moths (Such as: Ash, Dogwood, Lesser peachtree, Lilac, Oak, Rhododendron), Metallic wood (Such as: Bronze birch, Flatheaded appletree, Twolined chestnut), Longhorned beetles (Such as: Locust, Red oak)</p> <p>Leafminers</p> <p>Needleminers (Such as: Jeffrey pine, Lodgepole pine, Spruce)</p> <p>Scale crawlers (Such as: Cottonycushion, Cottony maple, Euonymus, Fletcher, Florida wax, Golden oak, Hemispherical, Lecanium, Magnolia, Oak kermes, Oystershell, Pine needle, San Jose, Tea, White birch)</p>	<p>1 1/3 fl. oz.</p>	<ol style="list-style-type: none"> <li>For borers, apply Whitmire 1-12 to the trunks and lower limbs of trees and shrubs when the adults begin to emerge. Consult your State Agricultural Experiment Station or Extension Service Specialist for proper time to treat. Apply uniformly as a coarse low-pressure spray.</li> </ol>
<p>Borers (Such as: Cottonwood, Peachtree)(1)</p>	<p>4 fl. oz.</p>	<ol style="list-style-type: none"> <li>For peachtree borers apply Whitmire 1-12 in water to flowering trees and shrubs of the genus Prunus as a trunk spray before newly-hatched larvae enter the trees. Apply as a coarse, low-pressure spray. Thoroughly wet all bark areas from ground level to scaffold limbs.</li> </ol>
<p>Beetles (Such as: Ambrosia, Anobiidae, Black turpentine, Cottonwood leaf, Elm leaf, European elm bark, Flea, Fuller rose, Japanese, June, Native elm bark, Pine, Willow leaf)(1)</p>	<p>10 3/4 fl. oz.</p>	<ol style="list-style-type: none"> <li>For preventive treatment apply the spray to the main trunk of trees in the early spring or when threat of attack exists from nearby infested trees.</li> </ol>
		<p>For remedial treatment apply the spray to the main trunk of infested trees when damage occurs but before adult beetles begin to emerge.</p>

\* Number in parentheses refer to Specific Directions.

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**DORMANT SPRAY (TREE AND FOREST PESTS)**

Use Whitmire 1-12 insecticide as a dormant or delayed dormant spray at the rates indicated to control the listed insects. Spray the entire trees by application to runoff using suitable ground spray equipment. Use the higher dosage of Whitmire 1-12 insecticide for severe infestations. Use oil as recommended by your State Agricultural Experiment Station or Extension Service Specialist.

Restrictions: Make only one application during the dormant season. Do not allow meat or dairy animals to graze in treated areas.

Pest*	Amount of Whitmire 1-12 in water to make 1 gal.	Specific Directions
Aphids (Such as: Mealy plum, Rosy apple, Woolly apple) Borer (Such as: Peach twig) Cutworms (Such as: Climbing) Leafrollers (Such as: Pandemis) Pear psylla adults Plant bugs Scale (Such as: San Jose)	1/3 to 2/3 fl. oz.	Tank mix with 1 to 2 gallons of a petroleum spray oil recommended for dormant use in 100 gallons of water.

**FRUIT TREES AND NUTS**

Use Whitmire 1-12 insecticide at the dosages indicated by application as a foliar spray to control pests listed in the following table. Mix the required dosage of Whitmire 1-12 in water. Spray for thorough and complete coverage of the foliage, using suitable hand- or conventional power-operated spray equipment. Treat when pests first appear or in accordance with local conditions. Consult your State Agricultural Experiment Station or Extension Service specialist for specific use information. Do not allow livestock to graze in treated areas. Attention: In California do not work with or contact trees within two days after treatment.

Pest*	Amount of Whitmire 1-12 in water to make 1 gal.	Specific Directions
Apples: Apple aphid Apple maggot Codling moth European apple sawfly Eyespotted bud moth Fruitree leafroller Green fruitworm Lesser appleworm Obliquebanded leafroller Orange tortrix Oriental fruit moth Pandemis leafroller Plum curculio Redbanded leafroller Rosy apple aphid San Jose scale Tarnished plant bug Tufted apple budmoth Variegated leafroller Woolly apple aphid	2 fl. oz.	Make no more than 8 applications per season. Do not apply last treatment within 28 days before harvest or apply last two treatments closer than 21 days apart.
Almonds: Navel orangeworm Peach twig borer San Jose scale	2 2/3 fl. oz.	Make no more than 3 applications per season to almonds and filberts and no more than 2 applications per season to walnuts. Do not apply within 14 days before harvest.
Walnuts: Codling moth Walnut scale	2 2/3 fl. oz.	
Pecans: Black pecan aphid Hickory shuckworms Pecan leaf scorch mite Pecan nut casebearer Pecan weevil Phylloxera spp.	1 1/3 fl. oz.	Make no more than 3 application per season. Do not apply within 28 days of harvest. Do not allow livestock to graze in treated orchards.

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**STORAGE AND DISPOSAL**

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

**STORAGE:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not store above 100°F for extended periods of time. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Container Disposal: METAL DRUM** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Container Disposal: PLASTIC** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**STORAGE AND DISPOSAL (for 8 fl. oz. size only)**

**STORAGE:** Store in a cool dry place away from heat or open flame. Keep in original container and preferably in a locked storage area.

**DISPOSAL:** Do not reuse empty container or hose-end sprayer. Wrap container and sprayer in newspaper and discard in trash.