Prescription Treatment® brand

Ultra-Fine Oil

All Season Horticultural Insecticide, Miticide and Fungicide

ACTIVE INGREDIENT: Paraffinic Oil [†] INERT INGREDIENT: Emulsifier	
†Unsulfonated Residue of Paraffinic Oil	
†10%-90% Distillation Range of Paraffinic Oil	
†Flash Point	345.0° F
Weight per Gallon	7.1 lbs.

CAUTIONKEEP OUT OF REACH OF CHILDREN

EPA Registration No. 862-23-499 EPA Establishment No. 499-MO-1

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION: Avoid contact with eyes, skin and clothing. Harmful if swallowed. Avoid breathing of spray mists or vapors. Avoid contamination of feed and foodstuffs.

STATEMENT OF PRACTICAL TREATMENT

If swallowed: Do not induce vomiting. Call a physician immediately. NOTE TO PHYSICIAN: This product contains a paraffinic petroleum oil. Do not induce vomiting. Vomiting may pose an aspiration pneumonia hazard.

If on skin: Wash with soap and water.

If in eyes: Flush with water. If inhaled: Move to fresh air.

PERSONAL PROTECTIVE EQUIPMENT APPLICATORS AND OTHER HANDLERS MUST WEAR:

- Long-sleeved shirt and long pants
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. 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 disposing of equipment washwaters. Apply this product only as specified on this label.

STORAGE AND DISPOSAL

- Prohibitions: Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.
- **2. Storage:** Store in a cool, dry, locked area out of the reach of children. Keep oil container tightly closed in storage to prevent entry of water.
- **3. Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.
- 4. Container Disposal: Metal: 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. Plastic: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

Do not apply this product through any type of irrigation system. 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 con-





tains 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 4 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, waterproof gloves and shoes plus socks.

USES

May be applied on the plants listed on this label which are growing in or around habitable buildings, along city streets and other rights-of-ways, as well as in agricultural settings. Refer to the appropriate table for the application rate needed to control a specific pest on a specific plant.

PESTS CONTROLLED

This product controls adelgids, aphids, lace bugs, leafhoppers, leafminers (larvae), mealybugs, mites, plant bugs, psyllids, sawfly larvae, scale, thrips, whiteflies and eggs of aphids, mites and certain caterpillars on vegetables, fruits, tree nuts, certain field crops, shrubs, trees, greenhouse plants, ornamental foliage plants and flowers. This product can be applied up to harvest.

MIXING INSTRUCTIONS

- Add sufficient water to the mixing tank to allow proper agitation by pump or paddles.
- Add other desired pesticide. If wettable powder formulation, mix the water and powder thoroughly so that the powder is totally suspended in the water before the oil is added. If other pesticide to be added is an emulsifiable formulation, do so after the oil and water has been thoroughly mixed.
- 3. Add oil under agitation when tank is 3/4 full. Top off with water to form milky solution.
- 4. Maintain agitation until solution is used.
- 5. In small equipment lacking agitators, stir or shake diluted spray frequently during application.
- It is important for users to read and follow all directions and restrictions on the labels of the proposed tank mix products.
- Flush fluid in sprayer hose lines back into tank reservoir if fluid is allowed to stand for more than 20 minutes.

APPLICATION INSTRUCTIONS

The target pest must be completely covered with spray. Oil residue on the plant surface often acts as a feeding and oviposition deterrent. However, the primary target is the pest itself as oil is a contact pesticide.

DILUTE APPLICATIONS: Defined as the number of gallons needed to completely cover all the tree surfaces, but not to the point of runoff. For most tree fruits this can be as much as 300-400 gallons per acre or as low as 100 gallons per acre for smaller trees. For mature citrus trees this can be as much as 800-1500 gallons per acre. Dilute applications ensure the best the coverage.

CONCENTRATE APPLICATIONS: (usually from 45 to 125 gallons spray per acre) may reduce coverage and effectiveness. Concentrate application includes the use of low volume (from 10 to 100 gallons spray per acre) sprayers. A concentrate application can provide satisfactory results as long

as the spray unit is properly engineered, calibrated and operated. Speed of travel for ground application is extremely important. Tractor speed from 1 M.P.H. to 4 M.P.H. is recommended depending on crop, crop size and target pest.

Low volume applications of Ultra-Fine® Oil will require approximately the same amount of oil per acre as dilute sprays but applied with much less water. Spray oil calculations should be based on no run-off of the oil phase of the mixture.

AERIAL APPLICATIONS: Use only as an emergency application when soil conditions do not permit regular ground application. Helicopter only. Apply quantity of product shown for each listed crop for control of listed insects in sufficient water to make a minimum of 20 gals. dilute spray per acre

TIMING THE TREATMENT

Applicator must determine the precise timing to fit local growth and climatic conditions.

DO NOT EXCEED MAXIMUM RATES OR APPLY MORE OFTEN THAN RECOMMENDED.

MAY BE USED UP TO DAY OF HARVEST.

TANK MIXES

Ultra-Fine® Oil may be mixed with other pesticides to improve the level of kill. Users should read and follow all directions and restrictions on the labels of the proposed tank mix products. The combination of Ultra-Fine® Oil with more than one additional pesticide is not recommended. Use caution and read all labels thoroughly when using any insecticides or miticides in combination with Ultra-Fine® Oil. Always conduct a test spray for plant sensitivity before making a full-scale application.

Note: This pesticide is to be sold only in this original unopened container.

USE PRECAUTIONS

Keep the oil container tightly closed in storage to prevent entry of water. All horticultural oils interfere with or slow plant transpiration and respiration during the period of evaporation. Do not spray plants under stress (i.e., drought, disease). Do not apply during periods of prolonged high temperature combined with high relative humidity. Due to the reduced respiration rate of the insect at temperatures below 50°F, the effectiveness of Ultra-Fine® Oil is reduced.

Do not tank mix with any herbicides. Do not tank mix with any insecticide or miticide whose label indicates that it should not be used with oil. Do not use with Sevin 50W formulation (carbaryl) on deciduous fruit trees.

The following list of pesticides represents some of the compounds that should not be used with Ultra-Fine® Oil, however this list is not exhaustive: anilazine (Dyrene), captan (Captan), captofol (Difolatan), cyprex (Dodine), chlorothalnil (Bravo), dimethoate (cygon), dinocap (Karathene), dithianon (Delan), fentin hydroxide (Supertin), fentinacetate (Fentin), folpet (Folpet), methiocarb (Metmercapturon), oxythioquinox (Morestan), PMA (Agrosun), propargite (Omite), lime sulfur, wettable sulfur or any other product containing sulfur. For fungicides not included in this listing, consult the label of the specific fungicide formulation for compatibility information when used with oil. We recommend consulting your local extension agent for local recommendations relative to a specific fungicide/oil mix on a specific crop. Keep spray equipment used for these other products separate from the equipment used for Ultra-Fine Oil.

Application safety during the bloom period should be determined for each individual species of plant to be treated by conducting a small test.

Protect painted surfaces, carpet and furnishings from overspray. May cause discoloration.



TABLE 1 Shade Trees, Shrubs, Ornamentals, Flower and Foliage Plants, Christmas Trees

Crop or Plant	Pest	Application Rate Gallons Oil per 100 Gal. Water	Time of Application
Shade Trees* and Shrubs including Conifers, Deciduous Broadleaf Evergreens & Woody Ornamentals. Omamental Trees* and shrubs such as: Conifers, Deciduous and Broadleaf Evergreens located along city streets, other rights-of-ways and in or around habitable buildings.	Aphids Adelgids Eriophyid Mites Gall Mites Honey Locust Plant Bugs Lace Bugs Leaf Beetle Larvae Leafminers Leafrollers Mealybugs Psyllids (immature) Sawfly (larvae) Sawfly (larvae)	2 - 3	Winter Dormant Period. Summer (Foliar or Cover).
Flowering and Foliage plants including Roses and other Flowering Shrubs. Foliage Ornamentals & Bedding Plants.	Scales (immature) Spider Mites Webworms Whiteflies	2 - 3 1 - 2	Winter Dormant Period. Summer (Foliar or Cover).
Christmas Trees*	Aphids Adelgids Scales (soft & hard) (immature) Spider Mites	2 - 3 1 - 2	Winter Summer

^{*} Oil removes the glaucous (blue) bloom from such evergreens as Colorado Blue Spruce and Koster Spruce. Always use lower dosage or test spray oil sensitive plants such as Cryptomeria, Smoke Tree, Chamaecypris, Juniper, Japanese Holly and Spruce. Tendency toward sensitivity: Red Cedar and Douglas Fir. Do not spray when buds have fully opened and shoot elongation is occurring. Do not spray Walnut foliage.

CAUTION: Spray no more than 4 consecutive sprays. The frequency of consecutive sprays should not exceed once every 2 weeks. Ultra-Fine® Oil may be used in rotation with other compatible insecticides or fungicides. Do not spray when there is obvious moisture deficit in leaves, or the plant is under stress. Early morning applications are recommended. For fall dormant applications, reduce rate to 2 gallons oil per 100 gallons water and limit use only to: American Red Oak, Japanese Black Pine, Dogwood, Weeping Cherry, Cornelian Cherry, Crabapple, Norway Maple, Purple Leaf Plum.

TABLE 2 Interiorscapes*

Plant	Pest	Application Rate Gallons Oil per 100 Gal. Water	Comments
Dieffenbachia Dracaena Ferns Palms Schefflera	Aphids Leafminers Mealybugs Scales Spider Mites Whiteflies	1	Do not apply to plants in direct sunlight behind glass. Due to varietal dif- ferences in response to a treatment of Ultra-Fine® Oil
Chrysanthemum Gardenias Jade Plant Philodendron	winternes	1 - 2	at the recommended rate, we recommend the appli- cator conduct a small test on 1 or 2 plants of the spe- cific variety to be treated.

 $^{^{\}star}$ Protect floor, floor coverings and furnishings from overspray

TABLE 3 Greenhouse

Crop or Plant	Pest	Application Rate Gallons Oil per 100 Gal. Water	Specific Comments
Ageratum Crown of Thorns Dieffenbachia Ferns Ficus Usianthus Orchid Palms Petunia Poinsettia Schefflera Sunflower	Aphids Fungus Gnats Leafminers Mealybugs Scales (soft and hard) Spider Mites Thrips Whiteflies	1	Due to varietal differences in response to a treatment of Ultra-fine" Oil at the recommended rate, we recommend conducting a small test on 1 or 2 plants of the specific variety to be treated.
Leaf Polish for Hardy Plants		1	
Aglaonema Aster Azaleas Begonias Browallia Camellias Carnation Celosia Chrysanthemum Coleus Cosmos Dusty Miller Easter Lilies Gardenias Gerbera Hellichrysum Hibiscus Foliage Hydrangea Jade Plant Marigold New Guinea Impatiens Nicotonia Philodendron Portulaca Reiger Begonias Snapdragon Zinnias	Aphids Fungus Gnats Leafminers Mealybugs Scales (soft and hard) Spider Mites Thrips Whiteflies	1-2	Due to varietal differences in response to a treatment of Ultra-Fine® Oil at the recommended rate, we recommend conducting a small test on 1 or 2 plants of the specific variety to be treated.

Some plants grown in greenhouses are more sensitive to oil treatments if any of the following conditions are present when application is made:

- High humidity
- A heavy overcast or cloudy day during rainy periods
- Inadequate air flow
- Intense sun and/or heat build up that stresses plant
- Night time
- Plants under water or temperature stress

Frequency of Application: For the greenhouse pests listed, use once a week initially, then as the pest is controlled, decrease the frequency to every 2-3 weeks as needed.

Application safety during bloom period should be determined for each individual species of plant to be treated by conducting a small test.

Powdery Mildew Control on Ornamentals

Apply a rate of 1 - 2 gallons Ultra-Fine® Oil per 100 gallons water from mid-summer to early fall every 2 - 4 weeks to zinnia, lilac, azalea, monarda, phlox, helianthemum and aster. If application to other woody or herbaceous ornamental plants is desired, we recommend first conducting a small scale test on specific plants that are to be treated, to check for sensitivity to the oil treatment. Ultra-Fine® Oil is not effective if the plant canopy is extremely dense because adequate coverage is difficult to attain. Greenhouse applications should be at the 1 gallon rate except for greenhouse grown roses for the cut flower market where the dose should not exceed 0.5 gals Ultra-Fine® Oil/100 gals water if applied weekly. A test spray should be conducted due to increased sensitivity of greenhouse grown plants.



 TABLE 4
 Vegetables: Outdoor and Greenhouse

Crop	Pest	Application Rate Gallons Oil per 100 Gal. Water	Time of Application
Asparagus Beans Beets Cabbage Cauliflower and other cole crops Celery Corn Cucurbit Eggplant Lettuce Melon Pepper Potato Radish Squash Sweet Potato Tomato Tobacco Herbs and Spices Basil Lemon Balm Mexican Oregano Spearmint	Aphids Mites Beetle Larvae Leafminers Thrain Leafhoppers Whiteflies	1-2 1-2 1-2 1-2 1-2 1-2 1-2 1-2 1-2 1-2	Do not exceed 4 applications in a growing sea- son. A 2 week application interval is recommended. Due to varietal differences in response to a treat- ment of Ultra-Fine® Oil at the recommended rate, we recommended rate, we recommended to a conduct- ing a small test on 1 or 2 plants of the specific variety to be treated.

Disease Control on Vegetables

Apply a rate of 1 - 2 gallons Ultra-Fine® Oil per 100 gallon water to control powdery mildew on cucurbits, melons and squash; gummy stem blight and Alternaria leaf blight on melons. Application should be made when the disease is first noticed and continue on a weekly basis to both the upper and lower leaf surfaces. If application to other vegetables listed above is desired, we recommend first conducting a small scale test spray. Greenhouse applications should be at the 1 gallon rate.

TABLE 5 Field Crops

Crop	Pest	Application Rate Gallons Oil per 100 Gal. Water	Time of Application
Corn (sweet & field)	Aphids Mites	2	Do not exceed 4 applica- tions in a growing sea-
Sugar Beets	Leafminers Corn Earworms, Rootworms Whiteflies	2	son. A 2 week application interval is recommended.

Table 6A

		Application Rate			Time of
Crop	Pest	Dilute Spray per 100 Gal. Water	Concentrate Gallons Oil per acre	Aerial* Gallons Oil per acre	Application (Stage of Development)
Apples	Aphids (eggs) Apple Red Bugs Mites (eggs) including European Red Mite Scales (hard and soft) Scurfy Scale Fruit Tree Leaf Rollers	2 2 2 2 2 2	6-8 6-8 6-8 6-8 6-8 6-8	6 - 8 6 - 8 6 - 8 6 - 8 6 - 8 6 - 8	Dormant through Tightcluster
	(eggs) Mites	1	4	4	Summer (Foliar or Cover) or Posthar- vest. Do not apply over fruit after waxy bloom forms.
Pears	European Red Mites (eggs) Pear Leaf Blister Mites (eggs) Pear Psylla Scales Fruit Tree Leaf Rollers (eggs)	1-2 2 2 2 2 2	4-6 4-6 4-6 4-6 4-6	4-6 4-6 4-6 4-6 4-6	Dormant or Delayed Dormant (up to and including petal fall.)
	Two-Spotted Spider Mites Brown Mites Pear Rust Mites Pear Leaf Blister Mites Pear Psylla	1 1 - 2 1.5 - 2 1.5 - 2	4 4 - 6 4 - 6 4 - 6	4 4 - 6 4 - 6 4 - 6	Summer (Foliar or Cover) or Postharvest.
Almonds Apricots Cherries	Aphids (eggs) Fruit Tree Leaf Roller (eggs) Tent Caterpillars San Jose Scale	2	6-8 6-8	6-8	Dormant or Delayed Dormant
	Mites and Scales	1-1.5	4-6	4-6	Summer (Foliar or Cover) or Postharvest. - Application should not be made over oil sensitive vari- eties. - Do not apply to trees lacking ade- quate moisture.
Peaches Nectarines	Aphids (eggs) Fruit Tree Leaf Rollers (eggs) Mites (eggs) Peach Tree Borers (hiber- naculae) Cottony Peach Scale San Jose Scale	1 - 2	4 - 8	4 - 8	Dormant or Delayed Dormant. Dormant.
	Mites Scales	1 - 2	4 - 6	4 - 6	Summer (Foliar or Cover) or Postharvest.
Plums Prunes	Aphids (eggs) Scales Mites (eggs) Peach Twig Borer (hibernaculae)	1.5 - 2	4 - 6	4-6	Dormant or Delayed Dormant to 1/2" Green Tip.
	Mites Scales	1-1.5	4-6	4-6	Summer (Foliar or Cover) or Posthar- vest. Do not apply over certain fresh market fruits after bloom starts to form as the oil spray will remove the waxy bloom. Application should not be made over oil sensitive varieties.
Pecans	Aphids (eggs) Scales Mites (eggs)	2	6-8	6-8	Dormant

 $^{^{\}star}$ Aerial application should be used only as emergency application when soil conditions do not permit regular ground application (helicopter only)



TABLE 6B

Cron	Pest	Application Rate		Comments
Crop	Pesi	Dilute Spray per 100 Gal. Water	Concentrate Gallons Oil per acre	Comments
Lemons and Grapefruit	Mites Scales including: California Red Scale	1.0 - 1.4 1.0 - 1.6	8 - 24	For best results, spray during Fall, early Winter & Spring months when red scale are more easily controlled and trees generally less reactive to oil. For all citrus oil sprays ensure adequate soil moisture: lesses should not wilt before noon.
Navel & Valencia Oranges, Other Citrus Varieties Including Non-Bearing	Mites including: Rust Mites Spider Mites Scales including: Black Scale California Red Scale Whiteflies & Blackflies Sooty Molds	1.0 - 1.4 1.0 - 1.3 1.3 - 1.6 1.0 - 1.3 1.0 - 1.3	8 - 24	For low volume oil spray treatment during the Spring, application should be discontinued as soon as temperatures go above 90°F during the day or relative humidity is expected to go down to 20 percent or below. Oils should not be used in late Fall if there is any danger of damage from cold. The addition of a tank mix pesticide will improve performance against scale.

TABLE 7 Small Fruits

Crop	Pest	Application Rate Gallons Oil per 100 Gal. Water	Time of Application
Caneberries	Mites	1	Spring - Summer
Blueberries	Mites Sawflies (eggs) Scales	2 2 3	Foliage Dormant
Strawberries	Aphids Mites	1	Dormant and Foliage

TABLE 7 Small Fruits (continued)

		Applicati	Time of	
Crop	Pest	Dilute Spray	Concentrate Spray* (40 - 100 Gals. Spray per Acre.)	Application
Grapes	Mealybugs	4 - 6 Gal. with 200 to 300 Gal. water/acre.	NR	Dormant - A tank mix using an insecticide improves control.
	Mites	2 gal. per 100 gal. water	NR	Bud swell or shoot growth of 5 - 7 cm (2-3 in.) in spring.
	Mealybugs	NR	4	Spray when crawlers are active and exposed usually around early Summer.
	Leafhoppers	NR	4	Best results will occur when sprayed during first brood. Sprays after grapes are more than 1/4" diameter may affect bloom.
	Mites	2 gal. per 100 gal. water.	NR	Postharvest

NR = Not Recommended

Apply before mites reach high populations. Vineyard should be vigorous and supplied with ample water prior to application.

Do not allow excessive webbing or burning.

No sensitivity to Ultra-Fine® Oil treatments have been seen in the vineyards of cabernet, merlot, chardonnay or ribier when used for insect control. Do not mix Ultra-Fine® Oil with dicofol (Kelthane), Captan, or sulfur since all can cause phytotoxicity in some varieties.

Miscellaneous:

Figs: Dormant or Delayed Dormant: Fig Scale - Use 3 Gals. in 100 Gal. water.

Olives: Postbloom through August and Postharvest: Scales - Use 1.5 gals. per 100 Gal. water. Apply at 400 to 1500 Gal. per acre.

Banana, Plantains: Use as needed to control Yellow Sigatoka Disease - Use 1 - 1.5 Gal. per 100 Gal. water. This application is also effective in loosening Sooty Mold Fungus and in preventing its formation by the control of Aphids, Mealybugs, Scales and Whiteflies.

Mangos: Use 1 - 1.5 Gals. per 100 Gal. water as needed to control Aphids, Mealybugs, Scales and Whiteflies.

Persimmons: Use 1 Gal. per 100 Gal. water for control of Leafrollers, Scales and BookLice (pscocids).

LIMITED WARRANTY AND LIABILITY:

This product conforms to the description and is suitable for the uses set forth on this label but is strictly limited to those uses solely as directed under the specified label conditions, and only if purchased in the original unopened container. MANUFACTURER AND SELLER DISCLAIM ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE (except as specified on this label). Buyer and all users shall assume all risk, liability and damage if this product is used, stored, handled or applied other than as specifically set forth on this label. LIABILITY OF MANUFACTURER AND SELLER AND USER'S REMEDIES SHALL BE LIMITED TO REFUND OF THE PURCHASE PRICE OR REPLACEMENT OF THE SPECIFIC QUANTITY INVOLVED. IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

A PRESCRIPTION TREATMENT® brand insecticide from:

Whitmire Micro-Gen Research Laboratories, Inc. 3568 Tree Court Industrial Blvd. St. Louis MO 63122-6682 © 2000 Whitmire Micro-Gen Research Laboratories, Inc.

^{*} Air-carrier or air-blast type sprayers strongly recommended to avoid plant injury and reduce effect on bloom of table grapes.

Revision Summary

Prescription Treatment® brand Ultra-Fine Oil All Season Horticultural Insecticide, Miticide & Fungicide (EPA Reg. No. 862-23-499)

Specimen Label Revision Date: 6/00

- Mixing Instructions section revised to include directions for flushing lines if solution is allowed to stand for more than 20 minutes.
- Directions on "Dilute Applications" added to the Application Instructions section.
- Use Precautions section revised to discuss product compatibility with fungicides.
- Notice of possible plant sensitivity to oil treatments added to Table 3 (Greenhouses).
- Directions for use on Persimmons added the Miscellaneous section.
- Miscellaneous changes to format: some tables have been re-numbered and/or rearranged.