


9779-1011

08/31/2010

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	U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505P) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460	EPA Reg. Number: 9779-1011	Date of Issuance: AUG 31 2010
		Term of Issuance: Unconditional	Name of Pesticide Product:
		Spray Oil 470	
NOTICE OF PESTICIDE: — Registration <u>x</u> Reregistration (under FIFRA, as amended)			
Name and Address of Registrant (include ZIP Code): Winfield Solutions, LLC P.O. Box 64589 St. Paul, MN 55164-0589		5881325 5836221 676/1275 676/1140 5881324 345/1165	
<p>Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.</p> <p>On the basis of information furnished by the registrant, the above named pesticide is hereby reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.</p> <p>Based on your response to the Reregistration Eligibility Decision, EPA has reregistered the product listed above. This action is taken under the authority of section 4(g)(2)(C) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. Reregistration under this section does not eliminate the need for continual reassessment of pesticides. EPA may require submission of data at any time to maintain the registration of your product.</p> <p>The Confidential Statement of Formula (CSF) dated "2-24-2009" for the <u>basic</u> formulation is accepted. The CSF for the alternate formulation CSF dated "July 21, 2010", also is accepted. These two CSFs replace all CSFs previously accepted for this product.</p> <p>The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments in this letter.</p> <p>See page 2 for required changes to labeling.</p> <p>You must submit one (1) copy of the final printed labeling before you release the product for shipment. Products shipped after 12 months from the date of this Notice or the next printing of the label whichever occurs first, must bear the new revised label. A stamped copy of the label is enclosed for your records. Should you have any questions, please contact William Jacobs at 703-305-6406 or jacobs.bill@epa.gov.</p>			
Signature of Approving Official: Meredith F. Laws, Chief Insecticide-Rodenticide Branch Registration Division (7505P)		Date: AUG 31 2010	

Label Changes for EPA Reg. No. 9779-1011

The changes identified below must be made to the proposed container label coded "0/0721/0" that was submitted on July 21, 2010.

1. Increase the font size for the heading "**DIRECTIONS FOR USE**" to make it clear that this section includes all text from where it appears on page 2 through the end of the table for "**GREENHOUSE AND OUTDOOR**" uses on page 7.
2. On page 4, add "**of plants listed as use sites on this label**" to the end of the sentence "**This product has not been tested on all species or varieties.**"
3. In the second paragraph under the table pertaining to applications to "**CITRUS: (Florida and Texas)**", replace "Best results" with "Improved efficacy".
4. In both paragraphs that appear in the "**Comments**" column of the table for "**GREENHOUSE AND OUTDOOR**", replace "we recommended conducting" with "conduct".



TM

Spray Oil 470

A Mineral Oil for Insect and Disease Control

ACTIVE INGREDIENT

Mineral Oil* 98.5%

INERT INGREDIENTS 1.5%

TOTAL 100.0%

Unsulphonated Residue* 99.00% (minimum)

Contains petroleum distillate

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID

If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. • 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 to 20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Do not give any liquid to a person. Do not give anything to an unconscious person. • Do not induce vomiting unless told to by a poison control center or doctor.
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 mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
Have the product container label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-877-434-7452 for emergency medical treatment information.	
NOTE TO PHYSICIAN: Do not induce vomiting. May cause aspiration pneumonia hazard. Contains petroleum distillate.	

See Additional Precautionary Statements.

EPA Reg. No. 9779-1011

Distributed By:
Winfield Solutions, LLC
P. O. Box 64589, St. Paul, MN 55164-0589

ACCEPTED
With COMMENTS
In EPA Letter Dated:

AUG 31 2010

Under the Federal Insecticide, Fungicide
and Rodenticide Act, As amended, for the
pesticide Registered under EPA Reg. No:

9779-1011

EPA Est. No.

NET CONTENTS _____ Gallons

0/0721/0

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed or absorbed through skin or inhaled. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist.

Personal Protective Equipment (PPE): Some materials that are chemical-resistant to this product are made of barrier laminate, nitrile rubber, neoprene rubber, or viton. If you want more options, follow the instructions for category E on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators, flaggers, and other handlers must wear: long-sleeved shirt and long pants, shoes and socks, and chemical-resistant gloves.

See engineering controls for additional requirements.

User Safety Requirements

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.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Engineering Controls: Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(6)].

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

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 washwater or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

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 green houses, 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 12 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, treated, such as soil or water, is: coveralls, shoes plus socks, and chemical-resistant gloves made of any waterproof material.

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.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal. In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call collect: CHEMTREC (800) 424-9300.

To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Nonrefillable containers. Do not reuse or refill this container. Clean container promptly after emptying.

Nonrefillable container equal to or less than 5 gallons. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. 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. If burned, stay out of smoke. Do not cut or weld metal containers.

Nonrefillable container greater than 5 gallons. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. 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. If burned, stay out of smoke. Do not cut or weld metal containers.

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. 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. If burned, stay out of smoke. Do not cut or weld metal containers.

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident,
call CHEMTREC 1-800-424-9300.

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) can influence pesticide drift. The applicator and grower must evaluate all factors and make appropriate adjustments when applying this product.

WIND SPEED

Do not apply at wind speeds greater than 15 mph at the application site.

TEMPERATURE INVERSIONS

If applying at wind speeds less than 3 mph, the applicator must determine if (a) conditions of temperature inversion exist, or (b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

DROPLET SIZE

Apply as a medium or coarser spray (ASABE standard 572), and the minimum volume mean diameter (VMD for spinning atomizer nozzles).

RELEASE HEIGHT

Ground Applications: Apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

Aerial Applications: Do not release spray at a height greater than 10 feet above the ground, top of crops, or above the orchard canopy.

ADDITIONAL REQUIREMENTS FOR AERIAL APPLICATIONS

Boom Length: The boom length must not exceed 75% of the wingspan for fixed-wing aircraft or 90% of the rotor blade diameter for helicopters.

Swath Adjustment: When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind. Leave at least one swath unsprayed at the downwind edge of the treated field.

ADDITIONAL REQUIREMENTS FOR AIRBLAST APPLICATIONS

For airblast applications, turn off outward-pointing nozzles at row ends and when spraying the outer row. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

MIXING DIRECTIONS

Use only in equipment with sufficient agitation to keep spray thoroughly mixed. Be sure tank is clean. With agitator running, start filling tank with water; add SPRAY OIL 470 when tank is about ½ full. Pump this mixture through the overflow and back into tank for about two minutes. If this mixture turns white, it indicates good emulsification. Fill the tank with water, adding other desired materials as tank is filling. If wettable powders are used, add and thoroughly mix with water before adding SPRAY OIL 470. Addition of an emulsifiable formulation should be done after the SPRAY OIL 470 and water has been thoroughly mixed. Observe all precautions and limitations on labeling of all products used in mixtures. Keep agitator running at all times. If an injector is used, first add 25 to 50 gals. of water to tank with engine running to provide good pressure. Put injector suction tube into the measured amount of SPRAY OIL 470, opening injector valve to allow the SPRAY OIL 470 to be sucked into the tank, then fill the tank with water.

Do not use if this material does not emulsify.

APPLICATION DIRECTIONS

Apply when pests are present and as specified on this label. Do not use in undiluted form. Sensitive foliage may be injured.

GROUND APPLICATIONS:

To ensure thorough coverage, dilute applications (greater than 150 gallons of spray solution per acre) should be made. Concentrate applications (usually from 20 to 150 gallons of spray solution) may reduce the coverage and thus the effectiveness. Application volumes depend on the crop type, crop size and target pest. Adjust the spray volume to obtain the best coverage without runoff. Extreme care should be taken when using concentrate sprays as the potential for enhanced crop phytotoxicity is increased. A concentrate application can provide satisfactory results as long as the spray unit is properly engineered, calibrated and operated.

AERIAL APPLICATIONS:

Dormant and Delayed Dormant Application Only: Apply 3 to 5 gals. in a minimum of 20 gals. of water per acre. Use only as an emergency application when soil conditions or site does not permit regular ground application.

This product has not been tested on all species or varieties. Before treating a large area, treat a small area and observe prior to full scale application.

Note: Use efficient equipment of the proper type. Avoid spraying during or immediately prior to hot or freezing weather (over 95°F or under 32°F), hot dry winds, rain or other unsuitable conditions; avoid over spraying or double spraying. Plants should be sprayed only when in vigorous condition and when their moisture condition is suitable. Before using, make certain spray tank is free of sulfur residues. Do not apply sulfur within 14 days **EXCEPT** in the Northwest (Oregon and Washington) where it may be used in combination on Pears as a Post Harvest (after old fruit is off the tree), Dormant and Delayed Dormant (before the scales slip, or at or prior to bud swell) treatment and on Apples prior to or up to the Delayed Dormant (½ inch green) period. In areas west of the Continental Divide do not apply this oil to trees within 90 days after and 60 days before Captan treatment. In areas east of the Continental Divide do not apply this oil to trees within 10 days after and 14 days before Captan treatment. If in doubt, spray a portion of one tree previously treated with Sulfur or Captan using 1 quart to 25 gallons water. Burn will show in several days if sufficient time has not elapsed.

A period of 14 days must elapse before any of the following chemicals are used before or after an application of SPRAY OIL 470: anilazine, chlorothalonil, dicloran, dicofol, Dikar, dinocap, permethrin.

Do not use chlorothalonil or dimethoate in a spray program with SPRAY OIL 470 on grapes and ornamentals. Do not use dicofol in a spray program with SPRAY OIL 470 on ornamentals. Do not use propargite with an oil spray or within 30 days before or after an oil spray.

FRUIT AND NUT CROPS

Crop	Pest	Application Rate (gallons of SPRAY OIL 470) per 100 gallons of water	Comments
Almond Apricot Cherry	Mites (eggs) San Jose Scale	2	Dormant or Delayed Dormant
	Fruit Tree Leafroller (eggs)	3	
	Mites Scales	1-1.5	
Apple	Aphid (eggs) Apple Red Bug Mite (eggs) Scales	2	Summer (foliar or cover) or postharvest. Do not spray oil on sensitive varieties. Do not apply to trees lacking moisture. Dormant to delayed dormant to ½ inch green.
	Fruit Tree Leafroller (eggs)	3	
	Mites	1-2	
Figs	Fig Scale	1-3	Dormant or Delayed Dormant
	Mites Mealybug Scale	1-2	Foliar Spray
Grapes	Mealybugs Mites Leafhopper* Whiteflies*	1-2	Using ground equipment, spray for optimum coverage of leaf surfaces. Repeat sprays every 10-14 days. For powdery mildew – Make first application pre-bloom and continue every ten days to three weeks depending on level of disease pressure. Use higher rate and/or shorter spray interval when disease conditions are severe. Oil will remove the bloom on grapes. Table grapes should not be sprayed within 60 days of harvest. On grapes, do not tank mix oil and copper more than once/season. Do not use copper and oil together with fruit present.
	Powdery Mildew		
Olive	Mites Scales	1.5	Prebloom to Postbloom Buckshot.
Peach Nectarine	Aphid (eggs) Mite (eggs) Fruit Tree Leafroller (eggs) San Jose Scale	2-3	Dormant or Delayed Dormant Use higher rates for leafroller and scales.
	Mites Scales	1-2	
Pear	Mite (eggs) Pear Psylla Scales	2	Dormant or Delayed Dormant (up to and including petal fall).
	Fruit Tree Leafroller (eggs)	3	
	Mites Pear Psylla	1-2 1.5-2	
Plum Prune	Aphid (eggs) Mite (eggs) Scales	1.5-2	½ inch Summer (foliar to cover) or postharvest. Do not apply to certain fresh market fruits after bloom starts to form as the oil spray will remove the waxy bloom. Do not spray oil on sensitive varieties.
	Mites Scales	1-1.5	
Walnut	Mite (eggs) Scales	1-2	Delayed Dormant Do not apply to sensitive varieties or after husk split.

CITRUS: (California Only) – Grapefruit, Lemons, Oranges (Navel and Valencia)

Mites -Citrus Red	-Citrus Rust	Apply ½ to 1½ gals. of oil per 100 gals. of water as thorough coverage spray (TC). Alternately, use a low volume spray (LV) to apply 1 to 10 gals. of oil per acre.
Scale Insects -Black -Citricola -Red	-Brown Soft -Purple -Yellow	Apply up to 10 gals. of oil per acre on bearing trees up to 10 feet in height. Add 1 gal. of oil per acre for each foot of height over 10 feet. Apply as a low volume spray (LV) 1 to 10 gals. of oil per acre.

Thorough coverage spray (TC): Applications achieving a uniform film wetting of all portions of the tree at 250 to 2000 gallons of spray solution per acre. The total volume is dependent on the size of the trees.

Low-volume spray (LV): Applications with droplet depositions achieved on all interior and exterior parts of the tree using 10 to 100 gallons of spray solution per acre.

Do not make an oil spray application within 2 weeks prior to or after an application of sulfur. On Citrus do not make an oil application within 60 days prior to or after an application of sulfur. Do not apply prior to or during period of excessively high summer temperatures. Do not apply oil spray when trees show stress. Consult with your local University of California Cooperative Extension Specialist for proper timing and spray program.

Do not exceed a maximum of 212 pounds of active ingredient (in a maximum volume of 2000 gallons of spray mix per acre) when treating citrus in California (based on a thorough coverage spray with 1-1/2 gallons of product mixed in 100 gallons of water).

CITRUS: (Florida and Texas) – Grapefruit, Lemons, Oranges

PESTS	APPLICATION RATE-GALS. SPRAY OIL 470	COMMENTS
Citrus Rust Mite	5 to 10 gals. per acre. Apply as a dilute spray.	Does not control citrus Snow Scale.
Spider Mites	5 to 10 gals. per acre. Apply as a dilute spray.	
Scale Insects -Black Soft -Brown Soft -Chaff -Glover -Purple -Red -Yellow	5 gals. per acre. Apply as a dilute spray.	Summer spray only. Do not apply to Navel oranges.
Scale Insects -Black Soft -Brown Soft -Chaff -Glover -Purple -Red -Yellow	5 to 10 gals. per acre. Apply as a dilute spray.	
Whitefly	5 gals. per acre. Apply as a dilute spray.	
Greasy Spot (Grapefruit)	5 gals. per acre. Apply as a dilute spray.	Tank-mix with sufficient copper fungicide to provide 4 lbs. per acre of metallic copper.
Greasy Spot (all other varieties)	5 to 10 gals. per acre. Apply as a dilute spray.	If disease pressure is severe, tank-mix 4 lbs. (metallic) copper per acre. Do not exceed 5 gals. oil if copper used.
Loosening sooty mold	5 to 10 gals. per acre. Apply as a dilute spray.	Use higher rate when disease pressure is heavy.

Dilute spray: Apply the SPRAY OIL 470 application rate in up to 1500 gallons of water per acre, or 30 to 35 gallons per tree, to over 45 gallons per tree for large trees.

Best results can be obtained when the SPRAY OIL 470 is added to a partially filled spray tank under proper agitation and all foliage is thoroughly covered.

Precautions in the use of SPRAY OIL 470 include: Do not apply SPRAY OIL 470 when trees are wilting. Do not apply SPRAY OIL 470 and sulfur within 3 weeks of each other in Florida or Texas. SPRAY OIL 470 applied after October 1 may increase susceptibility of trees to cold damage and may reduce the fruit crop the following year. SPRAY OIL 470 applied in the fall may inhibit solids formation in the juice and retard coloring of fruit and should not be applied within 60 days of anticipated harvest. Sensitive foliage may be injured.

Florida growers consult the Florida Citrus Spray and Dust Schedule, or your Agricultural Experiment Station or State Extension Service Specialist for complete details on the spraying program best suited to your locale. Texas growers consult with your Agricultural Experiment Station or State Extension Specialist for complete details on the spraying program suited to your locale.

Do not exceed a maximum of 159 pounds of active ingredient (in a maximum volume of 1500 gallons of spray mix per acre) when treating citrus in Florida or Texas.

ORNAMENTALS

Crop	Pest	Application Rate (ounces per gallon of water)	Comments
Foliage Ornamentals* & Bedding Plants*	Aphids Adelgids	1-2.5 oz. per gallon	Summer (Foliar or Cover): Do not spray plants during flowering.
Shade Trees** and Shrubs Including Conifers, Deciduous Broadleaf, Evergreen & Woody Ornamentals	Aphids Adelgids Eriophyid Mites Gall Mites Honey Locust Plant Bug Lace Bug Leaf Beetle Larvae Leafminer Leafrollers Mealybugs Psyllids (immature) Red Mites Sawfly (larvae) Scales (immature) Spider Mites Webworms Whiteflies	Winter Dormant Period: 2.5-4 oz. per gallon Summer (Foliar or Cover): 1-2.5 oz. per gallon	RESTRICTION: Spray no more than 4 times during the growing season. Use a 2-week minimum application interval. Do not spray when there is obvious moisture deficit in leaves, or the plant is under stress. 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 Plum. NOTE: May cause discoloration of Blue Spruce. Do not use on conifers or ferns not tolerant to oil sprays. Use enough spray solution to completely penetrate the leaf canopy and cover both top and bottom of all of the leaves and stems until wet but without significant runoff. Do not spray during flowering.
Ornamental Trees** Shrubs along city streets, other rights-of-way including Conifers, Deciduous and Broadleaf Evergreens			
Flowering and Foliage Plants* (including Roses and other Flowering Shrubs)	Same as above	Winter Dormant Period: 2.5-4 oz. per gallon	Do not spray during flowering.
Christmas Trees**	Scale (soft & hard) (immature) Spider Mites	2.3	Winter
		0.75-2	Summer

Use a lower concentration for more sensitive plants.

* Do not apply more than 0.75%v/v, do not spray when ambient temperatures exceed 75° F. Test at least 3 plants of all varieties prior to any extensive sprays.

** SPRAY OIL 470 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, Chamaecyparis, Juniper, Japanese Holly and Spruce. Tendency toward sensitivity: Red Cedar and Douglas Fir.

GREENHOUSE AND OUTDOOR

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.

Crop	Pest	Application Rate (gallons of SPRAY OIL 470) per 100 gallons of water	Comments	
Ageratum Dieffenbachia Ficus Orchid Petunia Schefflera	Crown of Thorns Ferns Lisianthus Palms Poinsettia Sunflower	Aphids Fungus Gnats Leafminers Mealybugs Scales (soft & hard) Spider Mites Thrips Whitefly	0.5-1	Due to varietal differences in response to a treatment of SPRAY OIL 470 at the specified rates, 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 Azaleas Browallia Carnation Chrysanthemum Cosmos Easter Lilies Gerbera Hibiscus Foliage Jade Plant New Guinea Impatiens Philodendron Reiger Begonias Zinnias	Aster Begonias Camellias Celosia Coleus Dusty Miller Gardenias Helichrysum Hydrangea Marigold Nicotonia Portulaca Snapdragon	Aphids Fungus Gnats Leafminers Mealybugs Scales (soft & hard) Spider Mites Thrips Whitefly	1-2	Due to varietal differences in response to a treatment of SPRAY OIL 470 at the specified rates, we recommend conducting a small test on 1 or 2 plants of the specific variety to be treated.

Some plants are more sensitive to oil treatments if any of the following conditions are present when application is made: High humidity (74%), an overcast or cloudy day, inadequate air flow, a small greenhouse where the sunlight is magnified causing a fast build-up of temperature and light intensity.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.