



## 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:

Date of Issuance:

19713-123

**SEP 2** 2010

NOTICE OF PESTICIDE:

\_ Registration

x Reregistration (under FIFRA, as amended)

Term of Issuance: Unconditional

Name of Pesticide Product:

DAMOIL™ DORMANT & SUMMER SPRAY OIL

Name and Address of Registrant (include ZIP Code):

Drexel Chemical Company P.O. Box 13327

Memphis, TN 38113-0327

ATTN: Luz Chan, Registration Manager

5881464 676/ 5835751 676/1140

5881462

S 881461 676/1130

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. On the basis of information furnished by the registrant, the above named pesticide is hereby reregistered under the Federal Insecticide, Fungicide and Redestinide Act. Positivities in the product to product a product the product to product the product that the product to product the product that the product to product the product to product the product that the product the product the product to product the product to product the product to product the product to product the product the product to product the product the product the product the product to product the product the product the product to product the product to product the product t

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.

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.

The Confidential Statements of Formula (CSFs) dated "8/20/2010" for the "Basic Formulation" and for the "Alternative Formulation" are accepted. These CSFs replace all other CSFs previously accepted for this product.

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.

## See page 2 for required label changes.

Submit one (1) copy of the final printed label 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. If you have any questions, contact William Jacobs at 703-305-6406 or jacobs.bill@epa.gov.

Signature of Approving Official:

Venus Eagle, Product Manager 01 Insecticide-Rodenticide Branch

Registration Division (7505P)

Jenns

Date:

SEP 2 2010

#### **Label Changes**

The comments below pertain to the label coded "123SP-0810\*Pending(RED)" which was submitted for reregistration of this product and received by the Office of Pesticide Programs on August 13, 2010.

- 1. In the second sentence of the first paragraph within the "NON-AGRICULTURAL USE REQUIREMENTS" box (Page 2), replace "to product" with "to produce".
- 2. In the last sentence of the second paragraph under "TANK-MIXING", change "jells" to "gels".
- 3. In the last sentence of the "Ground Application:" paragraph under "METHODS OF APPLICATION" (page 2), change "recommends" to "indicates".
- 4. In the list of pests claimed for "ALMONDS, APRICOTS, CHERRIES, NECTARINES, PEACHES, PLUMS, PRUNES *Dormant or Delayed Dormant:*" (pages 2 and 3), either delete the claim "certain other Scale insects" or delete the word "certain". Via future amendment, you may add claims for additional types of scale insects that this product will control on the crops listed in the same paragraph.
- 5. In the list of pests claimed for "ASPARAGUS, BEANS, BEETS, CORN, CUCURBITS, PEPPERS, SQUASH & TOMATOES:" (page 3), either delete "certain Caterpillars" or delete the word "certain". Via future amendment, you may add claims for specific types of caterpillars that this product will control on the crops listed in the same paragraph.
- 6. Revise the first two sentences of the "USE RESTRICTIONS:" paragraph for "CITRUS Citron, Grapefruit ... and other Citrus spp.:" so that they read as shown below.

Do not exceed a maximum of 212 pounds of active ingredient (29.5 gallons of this product) in a maximum volume of 2000 gallons of spray mix per acre when treating citrus in California. Do not exceed a maximum of 159 pounds of active ingredient (22.1 gallons of this product) in a maximum volume of 1500 gallons of spray mix per acre when treating citrus in Florida or Texas.

- 7. In the second "USE RESTRICTIONS:" paragraph ("By air, do ... Fall") for "CITRUS Citron, Grapefruit ... and other Citrus spp.:", insert a period between "application" (which should end the first sentence) and "Do" (which should begin the second sentence).
- 8. Replace the second and third sentences of the "USE RESTRICTIONS:" paragraphs for "Lemons, Lime:" with the text shown below.

Do not exceed a maximum of 212 pounds of active ingredient (29.5 gallons of this product) in a maximum volume of 2000 gallons of spray mix per acre when treating lemons or limes in California. Do not exceed a maximum of 159 pounds of active ingredient (22.1 gallons of this product) in a maximum volume of 1500 gallons of spray mix per acre when treating lemons or limes in Florida or Texas.

- 8. In the "Ornamental Trees ... *Period:*" and "Shade Trees ... *Period:*" paragraphs under "ORNAMENTALS, FLOWER AND FOLIAGE PLANTS, SHRUBS, CHRISTMAS TREES, AND SHADE TREES" (pages 4 and 5), either delete the entire claim "Certain caterpillars" or delete the word "certain".
- 9. In the eighth sentence of the paragraph for "Refillable Containers:", change "this pump" to "the pump".



ACCEPTED
With COMMENTS
In EPA Letter Dated:
19713 - 123

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

SEP 2 2010

# **Damoil**

Dormant & Summer Spray Oil

#### **ACTIVE INGREDIENT:**

| Mineral oil*       | 98.0%  |
|--------------------|--------|
| OTHER INGREDIENTS: |        |
| TOTAL:             | 100.0% |

\* Petroleum oil Min. Unsulfonated Residue - 92%; Petroleum oil Classification - Unclassified.

Contains petroleum distillates.

## KEEP OUT OF REACH OF CHILDREN CAUTION

See FIRST AID Below

EPA Reg. No. 19713-123 EPA Est. No. 19713-XX-XXX

**Net Content:** 

#### **FIRST AID**

#### IF ON SKIN OR CLOTHING:

- · 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:

- Call a poison control center or doctor immediately for treatment advice.
- · Do not give any liquid to the person.
- Do not induce vomiting unless told to do so by a poison control center or doctor
- Do not give anything by mouth to an unconscious or convulsing person.

#### IF IN EYES:

- 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 eye.
- · Call a poison control center or doctor for treatment advice.

#### IF INHALED:

- · 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 or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

Note to Physician: Contains petroleum distillates and may pose an aspiration pneumonia hazard.

#### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

**CAUTION:** Harmful if absorbed through skin. Avoid contact with eyes, skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

(Continued)

DAMOIL and the DREXEL logo are either trademarks or registered trademarks of Drexel Chemical Company.

## PRECAUTIONARY STATEMENTS (Cont.)

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are made of Barrier Laminate or Viton. If you want more options, follow the instructions for category G on an EPA chemical-resistance category selection chart.

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

See engineering controls for additional 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 damaged by 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: 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) 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**

Toxic to fish. 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 apply when weather conditions favor drift from areas treated. 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.

### PHYSICAL OR CHEMICAL HAZARDS

Do not use, pour, spill or store near heat or open flame.

#### 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.

Manufactured By:

Drexel Chemical Company P.O. BOX 13327, MEMPHIS, TN 38113-0327

SINCE 1972

123SP-0810\*Pending(RED) DAMOIL Page 1 of 5

Rec & 8/3/10

#### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, 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 (REI). The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the REI of 4 hours.

PPE required for early entry to treated areas that is permitted under the WPS 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, and 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 product agricultural plants on farms, forests, nurseries, or greenhouses.

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

DAMOIL is an especially refined phytonomic oil contact insecticide. It is for use on plants in foliage or the dormant stage.

#### **MIXING INSTRUCTIONS:**

1) Add enough water to mix tank to begin agitation. 2) Add micronutrients and other pesticides that are to be part of the mix. If dry pesticide products are used, premix the materials with water thoroughly and add to mix tank. DO NOT add this product before uniform mixture of pesticide and water is obtained. 3) Maintain agitation until the spray is applied. Flush any spray mixture remaining in the hoses back into the tank if the solution stands for more than 20 minutes.

#### TANK-MIXING:

Tank-mix only with products registered for use on the specific crop to be treated. When using this product in combination with other pesticides as directed on this label, observe the most restrictive rates, tank-mixing prohibitions, precautionary statements and limitations listed on the product labels involved.

Before tank-mixing with other labeled products, check for tank-mix compatibility. A jar test prior to tank-mixing this product with other pesticides or liquid fertilizer will ensure compatibility. Use a clear glass quart jar with lid and mix the tank-mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately one-half hour. If components of the mixture separate readily, a compatibility agent will be helpful in maintaining the stability of the spray mixture. If the mixture balls-up, forms flakes, sludges, jells, oily films or layers or other precipitates, the components of the mixture are not compatible.

#### **METHODS OF APPLICATION**

This product may be applied using conventional hydraulic sprayers, concentrate application equipment, ground applicators, or aircraft. Do not apply this product or mixes made from it via chemigation.

Ground Application: When applying by ground spray equipment as dilute or concentrate spray, apply the labeled amount of this product in sufficient water for thorough coverage. Reduce spray volume proportionally for smaller and immature plants. If applied as a concentrate spray, the application rate must equal the amount of this product per acre on a per 100 gallon basis except where actual rates are specified. For example, if the dilute application recommends 1 gallon of this product per 100 gallons of water and it requires 500 gallons of spray for thorough coverage, the concentrate spray would require 5 gallons of this product per acre.

Aerial Application: Apply the quantity of product indicated in sufficient water to make a minimum of 20 gallons of spray per acre except where indicated otherwise. Use aerial application only if growing and/or soil conditions indicate a ground application to be unfeasible.

#### SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, and relative humidity) and method of application (e.g. ground, aerial, or 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 of (a) conditions of temperature inversion exist, or (b) stable atmosphere 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.

#### Airblast Applications

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

#### **Ground Spraying Applications**

Release Height: For applications using ground-spraying equipment, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

#### Aerial Applications

Release Height: For aerial applications of agricultural products, do not release spray at a height greater than 10 feet above the ground, top of crops, or above the orchard canopy.

**Boom Length:** The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

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 width unsprayed at the downwind edge of the treated field.

#### INSTRUCTIONS AND PRECAUTIONS:

DO NOT USE THIS PRODUCT in combination with or immediately preceding or following applications of chloropropylate, captan, dyrene, dikar, dichlone, folpet, karathane, morestan, morocide, sulfur compounds, propargite and carbaryl.

For foliage application, the spray tank must be free of any sulfur residue before using this product. Do not combine sulfur sprays with this product on foliage and do not follow a previous application of sulfur or apply sulfur following this product until sufficient time has elapsed for safety (at least 30 days) except in the Northwest (OR and WA). In OR and WA, it may be used in combination on Pears as a post-harvest (after all fruit is off the tree), dormant and delayed dormant (before scales slip, or at or prior to bud swell) treatment.

Use caution when applying this product at temperatures above 90°F. Treat a small area and observe it for signs of damage to plants (phytotoxicity). Allow enough time for symptoms to appear before continuing to spray.

Do not use this product when temperatures are above 95°F. When temperatures drop below 32°F (usually nighttime lows), do not spray trees and vine crops until daytime temperatures have warmed to a point above 32°F and are free from moisture due to melting frost or heavy dews. Application to trees weakened by disease, drought, drying winds or high nitrogen applications may result in oil injury.

#### **USE INSTRUCTIONS:**

Dilute this product with water before use.

Amounts given are for 100 gallons of diluted spray solution unless otherwise specified.

ALFALFA Seed Crop Only: Use 1 quart of this product per acre in a minimum of 20 gallons of water per acre by ground application or minimum of 10 gallons per acre by air when used in combination and at the specified label rates with Malathion 5EC (an emulsifiable concentrate containing 5 pounds of malathion per gallon) or other insecticides or miticides that permit tank mixture with oil for control of the pests listed on the label. To increase the effectiveness of desiccants, apply 2 gallons of this product per acre in a minimum of 10 gallons of spray by air. Use is limited to those herbicides/desiccants labeled for Alfalfa Seed desiccation.

Spider mites: Use 1 quart of this product per acre at the dilutions noted above.

**USE RESTRICTION:** Do not apply more than 2 gallons of this product per acre per application by air.

ALMONDS, APRICOTS, CHERRIES, NECTARINES, PEACHES, PLUMS, PRUNES Dormant or Delayed-Dormant: Black scales, Brown apricot scales, European fruit lecaniums, Frosted scales, Ital-

ian pear scales, Oleander scales, Olive scales (Parlatoria scales), Parlatoria, Putnam scales, Red spider mites, Brown mites, San Jose scales, Soft brown scales, certain other Scale insects, eggs of Aphids—Apply 1.5 to 2 gallons of this product in 300 to 600 gallons of water or 4 to 6 gallons per acre in a minimum of 20 gallons of spray. Summer Use: Red spider mites—Apply 3 to 4 quarts of this product. Summer stages of Brown apricot scales, San Jose scales—Apply 1 gallon of this product.

Almonds and Apricots Dormant or Delayed-Dormant: Brown mite, European red mite, San Jose scale—Apply 4 to 8 gallons of this product in a minimum of 20 gallons of spray per acre. Spring or Summer Use: Brown mite, European red mite, Pacific mite, Two-spotted mites—Apply 1 to 2 gallons of this product in 300 to 600 gallons of water per acre as dilute spray. Apply 4 to 6 gallons of this product in a minimum of 20 gallons of water as concentrate spray. If applied by air, DO NOT apply more than 4 to 6 gallons of this product in a minimum of 20 gallons of spray.

Plums and Prunes Dormant or Delayed-Dormant: Peach twig borer—Apply 1.5 to 2 gallons of this product in 100 gallons of water. As concentrate spray, apply 6 to 8 gallons of this product per 20 to 125 gallons of water. If applied by air, use 6 to 8 gallons of this product in a minimum of 20 gallons of water.

**USE RESTRICTIONS ON CHERRIES ONLY:** DO NOT apply more than 1.5 gallons of this product in 100 gallons of spray mixture or 1.5% by volume. DO NOT apply this product in conjunction with azinphosmethyl based insecticides.

**USE RESTRICTIONS:** Do not apply more than 17 gallons of this product per acre per application by ground and 11.7 gallons of this product per acre per application by air during the dormant or delayed-dormant period. During the Summer period, do not apply more than 11.7 gallons of this product per acre by air on Almonds, Apricots, Cherries, and Plums.

APPLES Dormant or Delayed-Dormant: Aphid eggs, Pear scales, Red spider mites, San Jose scale—Apply 1 to 2 gallons of this product as dilute spray. Delayed-Dormant: Rust mites—Apply 1 to 2 gallons of this product. Dormant (OR, WA): Mites, San Jose scales—Apply 1 to 1.5 gallons of this product as dilute spray with Sulfur or Lime sulfur at the label specified rate. As concentrate spray apply 4 to 6 gallons of this product with Sulfur or Lime sulfur at the label specified rate in 20 to 100 gallons of spray per acre. Summer Use: Apply 1 to 1.5 gallons of this product. For control of Red spider mites, apply 0.75 to 1 gallon of this product as dilute spray.

Use Precautions: Oil plus Sulfur or Lime sulfur can cause severe foliage and fruit bud injury if applied after the dormant period.

**USE RESTRICTION:** Do not apply more than 228 gallons of spray per acre per application by ground during the delayed-dormant period.

ASPARAGUS, BEANS, BEETS, CORN, CUCURBITS, PEPPERS, SQUASH, & TOMATOES: Aphids, Beetle larvae, certain Caterpillars, Leafminers and Mites—Apply 1 to 2 gallons of this product in 100 gallons of water.

**USE RESTRICTIONS:** Do not apply more than 1 gallon of this product per 100 gallons of water per acre per application by ground equipment. On Field corn, do not apply more than 2 gallons of this product per 100 gallons of water per acre per application by ground. By air, do not apply more than 0.5 gallon of spray per acre per application on Corn.

**AVOCADOS:** Mites and Thrips—Apply 1 to 4 gallons of this product per 100 gallons in a dilute spray of 400 to 3000 gallons per acre. For concentrate spray, apply 1 to 18 gallons of this product per acre in 50 to 100 gallons of spray mixture or in enough water for adequate coverage. For aerial application, apply 1 to 18 gallons of this product per acre in 20 to 100 gallons of spray. When application of this product is more than 2% v/v concentration, treat a small area and observe. Allow enough time for symptoms to appear before continuing to spray.

**USE RESTRICTION:** Do not apply more than 30 gallons of this product per acre per application.

**BANANAS, PLANTAINS:** Black leaf streak, Sigatoka (black, yellow); This product will also loosen Sooty mold fungus and limit its formation by controlling Aphids, Mealybugs, Scale insects and Whiteflies – Apply 0.5 to 1.5 gallons of this product in 20 to 100 gallons of water per acre. For application by Mist blower, use 1.5 gallons of this product in 6 gallons of water per acre.

Begin application when disease or insect pest first appears and continue every 10 to 15 days during the rainy period or as needed. DO NOT apply when daytime temperatures exceed 80°F (26.6°C) as injury may occur.

Phytotoxicity may be affected by the quantity of oil used, vigor of trees,

and temperatures at time of application. Bag fruits or use a directed spray on unbagged fruits to improve crop safety.

**USE RESTRICTION:** Do not apply more than 1.5 gallons of this product per acre per application using ground equipment.

**BLUEBERRIES, BUSHBERRIES, CANEBERRIES:** Mites, Powdery mildew, Rust—Apply 0.75 to 1.5 gallons of this product in 100 gallons of water per acre with ground equipment for optimum spray coverage of leaf surfaces. For fungal diseases, use at least 200 psi spray pressure.

USE RESTRICTION: Do not apply more than 1.5 gallons of this product per acre per application using ground equipment. CITRUS

Citron, Grapefruit, Mandarins, Oranges (Navel, Valencia), and Other Citrus spp.: Scales (Black, Brown, Citricola, Purple, Red, Yellow), Spider mites (Pacific, Red, Two-spotted) — Apply 1.2 to 1.4 gallons of this product in late Summer through October. In Southern California, apply to Grapefruits from July to October; Navel oranges from July to August; Valencia from July to September. In Oxnard Plains, apply throughout the year. Apply in enough water for thorough coverage. As concentrate spray, apply 1.2 to 1.4 gallons of this product in a minimum of 20 gallons of spray per acre.

**Use Precaution:** On Navel oranges, do not apply during or after color break.

**USE RESTRICTIONS:** Do not exceed a maximum of 212 pounds of active ingredient (29.5 gallons of this product) (in a maximum volume of 2000 gallons of spray mix) per acre when treating citrus in California.

Do not exceed a maximum of 159 pounds of active ingredient (22.1 gallons of this product) (in a maximum volume of 1500 gallons of spray mix) per acre when treating citrus in Florida or Texas.

By air, do not apply more than 30.1 gallons of this product per acre per application Do not apply more than 1.5 gallons per acre per application using ground equipment during late Summer and Fall.

On other Citrus varieties, do not apply more than 19.3 gallons of this product per acre per application by air.

Lemons, Limes: Scales (Black, Brown, Purple, Red, Yellow), Mites (Bud, Flat, Red spider) – Apply 1.2 to 1.4 gallons of this product per acre in late Spring and late Summer through December. In Southern California, apply 1.2 to 1.4 gallons of this product per acre only in August and September. In the Coastal part of Southern California, use 0.5 to 1.4 gallons of this product per acre in May and June and/or September through December whereas in the Interior part, apply in April and May and/or September through November. In Oxnard Plains, application can be made throughout the year.

Apply in enough water for thorough coverage. As concentrate spray, apply this product in a minimum of 20 gallons of spray per acre.

USE RESTRICTIONS: On Lemons, do not apply more than 0.014 gallon (1.8 fl. ozs.) of this product per gallon of water per application by ground. Do not exceed a maximum of 212 pounds of active ingredient (29.5 gallons of this product) (in a maximum volume of 2000 gallons of spray mix) per acre when treating citrus in California. Do not exceed a maximum of 159 pounds of active ingredient (22.1 gallons of this product) (in a maximum volume of 1500 gallons of spray mix) per acre when treating citrus in Florida or Texas.

By air, do not apply more than 30.1 gallons of this product per acre per application.

On Limes, do not apply more than 1.5 gallons of this product per acre per application by ground and air.

All Citrus Varieties: Use this product as an adjuvant with a suitable insecticide or miticide.

Do not exceed 0.4% v/v concentration. Do not use this product when freezing temperatures are expected within 24 hours of application. Precautions should be taken when combining this product with certain insecticides and miticides due to possible increased phytotoxicity when applied over the foliage. Consult an Agricultural Extension Service agent for recommendations on special combinations.

COFFEE: Green scale, Coffee borer—Apply 3 to 6 gallons of this product in 100 gallons of water per acre. Use water only as a diluent. USE RESTRICTION: Do not apply more than 6 gallons of this product per acre per application.

FIGS Dormant or Delayed-Dormant: Fig scales—Use 2 to 3 gallons of this product as dilute spray. Use 3 gallons of this product for severe infestation. Apply 4 to 6 gallons of this product in a minimum of 50 gallons of spray as a concentrate spray.

**USE RESTRICTION:** Do not apply more than 3 gallons of this product per 100 gallons of water per acre per application using ground equipment during the dormant or delayed-dormant period.

GRAPES Dormant: Mealybugs-Apply 4 to 6 gallons of this product

in 200 to 300 gallons of spray solution per acre. If applied in tank mixture with another insecticide, use 1 to 2 gallons of this product in 200 to 300 gallons of water per acre to control Mealybugs. As a concentrate spray, apply 1 to 2 gallons of this product with an appropriate insecticide in enough water for thorough coverage.

Grape and Variegated leafhopper nymphs (suppression only)—Apply 1 to 1.5 gallons of this product in 100 gallons as dilute spray or 1 to 3 gallons per acre as concentrate spray.

Mites (suppression only)—Apply 1 to 2 gallons of this product per acre as concentrate spray.

**Use Precaution:** This product can temporarily affect surface bloom appearance, but will not cause subsurface injury. DO NOT apply this product within 2 days of harvest of Grapes intended for fresh market for suppression of Leafhopper or Mites.

**USE RESTRICTION:** Do not apply more than 17.4 gallons of this product per 300 gallons of water per acre per application using ground equipment during the postharvest and dormant periods.

**HOPS:** Mites, Powdery mildew—Apply 1 to 2 gallons of this product in 100 gallons of water per acre. Begin application at early leaf stage and repeat at 10 to 14 day intervals. Discontinue application at Burr development.

**USE RESTRICTION:** Do not apply more than 5.3 gallons of this product per acre per application using ground equipment.

**OLIVES:** Black scales, Oleander scales, Parlatoria scales, Olive scales, Spider mites— Apply 1.5 gallons of this product per 100 gallons of spray solution per acre. Apply in prebloom or in postbloom up to buckshot.

**USE RESTRICTIONS:** Do not apply more than 21.7 gallons of this product per acre per application using ground equipment during the postharvest and prebloom periods. Do not apply more than 0.02 gallon per gallon of water (2 gallons of this product per 100 gallons of water) per application during the dormant and delayed-dormant periods.

PEARS Dormant or Delayed-Dormant: Aphid eggs, Pear scales, Red spider mites, San Jose scale-Apply 1 to 2 gallons of this product as dilute spray. Delayed-dormant: Pear psylla-Apply 2 gallons of this product as dilute spray. As concentrate spray, apply 4 to 6 gallons in a minimum of 20 gallons of spray per acre. Delayed-dormant and Fall Spray: Blister mites-Apply 2 gallons of this product. Summer Use: European and Pacific red mites, Two-spotted spider mites -Apply 1 to 1.5 gallons of this product in 400 to 800 gallons of water as dilute spray. For control of Red spider mites, apply 0.75 to 1 gallon of this product. As concentrate spray, do not apply more than 4 gallons of this product in a minimum of 20 gallons of spray per acre. If applied by air, do not apply more than 4 to 6 gallons of this product in a minimum of 20 gallons of spray per acre. California Only: As concentrate spray, apply 4 to 6 gallons of this product in 90 to 120 gallons of spray per acre. For summer forms of Italian pear scales and San Jose scales, apply 1 to 1.5 gallons of this product as concentrated spray. Dormant (OR, WA): Pear psylla-Apply 1 to 1.5 gallons of this product as dilute spray with Sulfur or Lime sulfur at the specified label rate. As concentrate spray, DO NOT apply more than 5 gallons of this product with Sulfur or Lime sulfur at the labeled rate in 20 to 100 gallons of spray per acre.

**Use Precaution:** Oil plus Sulfur or Lime sulfur can cause severe foliage and fruit bud injury if applied after the dormant period.

**USE RESTRICTIONS:** Do not apply more than 2.7 gallons of this product per acre per application during the delayed-dormant period and 228 gallons per acre during the dormant period with ground equipment; do not apply more than 53.5 gallons of this product per acre per application by air during the delayed-dormant period. For Summer use on Pears, do not apply more than 0.2 gallon of this product per gallon of water using ground equipment.

**PISTACHIOS:** Dormant and Delayed Dormant Applications: Soft scale, Wintering phytocoris—Apply alone or in combination with other registered products shown effective against Soft scale.

For concentrate applications, apply 4 to 8 gallons of this product in 70 to 150 gallons of water per acre. Do not use more than 6% v/v solution as a concentrate application.

For dilute applications, apply 5 to 10 gallons of this product in 250 to 500 gallons of water per acre. Do not use more than 2% v/v solution as a dilute application. For moderate to severe pest population, use concentrate applications. Apply by mid-February. Applications made in January or February, especially at higher rates, may result in advanced bud break and bloom, which may increase the potential for frost damage. Do not apply this product when orchard is not vigorous or when under stress.

**USE RESTRICTION:** Do not apply more than 17 gallons of this product per acre per application during the delayed-dormant and dormant periods using ground equipment.

STRAWBERRIES: Two Spotted spider mites—Use 1 to 2% v/v in 60 gallons of water per acre with air assisted low volume ground applicators or 200 gallons of water per acre with standard ground spray equipment. Application may be made during the winter months when plants are semi-dormant. Do not use this product from peak bloom through peak fruiting period. Application should be made when Mites are at no more than a moderate infestation level. Higher levels of Mites infestations will require treatment with more effective miticides. Make applications at no less than 14 days between applications. Consult your local Extension Office for more specific local mite threshold density recommendations for this type of treatment. When using refined petroleum oils on strawberries, there will be a danger of phytotoxicity. To reduce the problem, do not apply this product when warm temperatures, 75°F and above, are expected for several days after application. In California, do not apply this product from:

January 16 to May 30 in Orange and San Diego counties and the Oxnard Plains

February 1 to June 15 in the Santa Maria Valley

March 1 to June 30 in Monterey and Santa Cruz counties.

**USE RESTRICTION:** Do not apply more than 1.5 gallons of this product per 200 gallons of water per acre per application using ground equipment.

TROPICAL CROPS (Kiwi, Mango, Papaya, Pineapple):

Kiwi: Scales (Greedy, Latania, Oleander, San Jose)—Apply 4 to 6 gallons of this product per 100 gallons of water per acre. Use the high rate when pests populations are high.

**USE RESTRICTION:** Do not apply more than 6 gallons of this product per acre per application using ground equipment.

Mango: Mites, Powdery mildew—Apply 1 to 1.5 gallons of this product in 100 gallons of water per acre.

**USE RESTRICTION:** Do not apply more than 1.5 gallons of this product per acre per application using ground equipment.

Papaya: Mites, Papaya ringspot virus, Powdery mildew—Apply 0.75 to 1.5 gallons of this product in 100 gallons of water per acre.

**USE RESTRICTION:** Do not apply more than 1.5 gallons of this product per acre per application using ground equipment.

**Pineapple:** Bud moth, Chinese rose beetle, Mealybugs—Apply 1 to 2 gallons of this product in 100 gallons of water per acre as spray. Apply 1 to 2 gallons of this product per 100 gallons of water as dip. Dip for 30 seconds.

**USE RESTRICTIONS:** Do not apply more than 2 gallons of this product per acre per application using ground equipment. As dip treatment, do not apply more than 2 gallons of this product per 100 gallons of water.

**TOBACCO:** Aphids, Beetle Larvae, Leafhoppers, Leafminers, Mites, Thrips, Whitefly—Apply 0.75 to 1 gallon of this product per 100 gallons of water.

**USE RESTRICTION:** Do not apply more than 1 gallon of this product per 100 gallons of water per acre per application using ground equipment

ORNAMENTALS, FLOWER AND FOLIAGE PLANTS, SHRUBS, CHRISTMAS TREES, AND SHADE TREES

Ornamentals (Foliage and Bedding Plants) Winter Dormant Period: Aphids, Adelgids, Bugs (immature), Caterpillars, Eriophyid mites, Gall mites, Lace bugs, Leaf beetle larvae, Leafminers, Mealybugs, Psyllids (immature), Sawfly larvae, Scales (immature), Spider mites, Whiteflies (immature)—Apply this product at 2 to 3 gallons as needed. Summer: Apply 1 to 2 gallons of this product as foliar or cover spray as needed.

Flower and Foliage Plants (including Roses and other flowering shrubs) Winter Dormant Period: Aphids, Adelgids, Bugs (immature), Caterpillars, Eriophyid mites, Gall mites, Lace bugs, Leaf beetle larvae, Leafminers, Mealybugs, Psyllids (immature), Sawfly larvae, Scales (immature), Spider mites, Whiteflies (immature)—Apply this product at 2 to 3 gallons as needed. Summer: Apply 1 to 2 gallons of this product as foliar or cover spray as needed.

Ornamental Trees (Shrubs along city streets, other Rights-of-way including Conifers, Deciduous and Broadleaved evergreens) Winter Dormant Period: Aphids, Bugs (immature), certain Caterpillars, Eriophyid mites, Gall mites, Lace bugs, Leaf beetle larvae, Leafminers, Mealybugs, Psyllids (immature), Sawfly larvae, Scales (immature), Spider mites, Whiteflies (immature)—Apply this product at 2 to 4 gallons as needed. Summer: Apply 1 to 3 gallons of this product as foliar or cover spray as needed.

See 'Plant Restrictions' section below for use precautions.

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Shade Trees and Shrubs including Conifers, Deciduous Broadleaf Evergreens and Woody Ornamentals Winter Dormant Period: Aphids, Bugs (immature), certain Caterpillars, Eriophyid mites, Gall mites, Lace bugs, Leaf beetle larvae, Leafminers, Mealybugs, Psyllids (immature), Sawfly larvae, Scales (immature), Spider mites, Whiteflies (immature)—Apply this product at 2 to 4 gallons as needed. Summer: Apply 1 to 3 gallons of this product as foliar or cover spray as needed.

See 'Plant Restrictions' section below for use precautions.

Christmas Trees Winter: Aphids, Adelgids, Scales (soft and hard; immature), Spider mites—Apply in 2 to 4 gallons of this product as needed.

**Summer:** Aphids, Adelgids, Scales (soft and hard; immature), Spider mites—Apply 1 to 3 gallons of this product as needed.

Do not apply more than 0.02 gallon (2.56 fl. ozs.) per gallon of water per application using ground equipment during the Winter period.

Plant Restrictions: Oil removes the glaucous (blue) bloom from such Evergreens as Colorado blue spruce and Koster spruce. Do not spray on Walnut foliage. Always use lower dosage or test spray oil sensitive plants such as *Chamaecypris*, *Cryptomeria*, Japanese holly, Juniper, Smoke tree and Spruce. Tendency toward sensitivity: Red cedar and Douglas fir. Use with precaution and reduce dosage for dormant application on Sugar maple and Red bud. Do not spray when buds have fully opened and shoot elongation is occurring.

Do not use on Conifers or Ferns not tolerant to oil sprays. In California, limit the use of this product to American red oak, Cornelian cherry, Crabapple, Dogwood, Japanese black pine, Purple leaf plum, Weeping cherry. Keep sprays away from open blooms; bleaching and spotting has been observed with the open blooms of certain plants.

Do not apply this product when there is obvious moisture deficit in leaves or plant is under stress.

Do not apply this product more than 4 times during the growing season. Apply in a minimum 2 week interval. For Fall dormant applications, reduce the rate to 2 gallons of this product.

WALNUTS Late Spring to Mid-Summer Only: Summer stages of European fruit scales, Frosted scales, Red spider mites, San Jose scale and other Soft-shelled scales—Apply 0.5 to 1 gallon of this product

**Delayed Dormant:** Black, Calico, European fruit lecanium scales, Frosted, Olive, Red spider mite eggs, San Jose scale and Walnut aphid eggs—Apply 2 gallons of this product in 300 to 500 gallons of water. Spider mites—Apply 4 gallons of this product per acre in 200 to 400 gallons of water on fully expanded leaves as foliar spray. As concentrate spray, for delayed dormant and foliar sprays, apply in a minimum of 40 gallons of water per acre.

As an adjuvant for neutral copper compounds for control of Walnut blight in pre- and postbloom sprays: Apply 1 quart of this product per 100 gallons of water as a dilute spray. Follow dosages and timing on the copper product label.

**Use Precautions:** Use this product only on trees that have not suffered from lack of moisture or other stressing factors during the growing season. Do not apply when soil moisture is low. Do not apply after husk solit.

**USE RESTRICTION:** Do not apply more than 7.7 gallons of this product per acre per application during the dormant and delayed-dormant period and 0.14 gallons of this product per gallon of water (68.2 gallons per 500 gallons of water) per application during late Spring using ground equipment.

#### WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given berewith. The foregoing is a condition of sale by the Seller and is cepted as such by the Buyer.

## STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Storage should be under lock and key in a ventilated room and secure from access by unauthorized persons and children. Storage should be in a cool, dry area away from any heat or ignition source. Do not stack over 2 pallets high. Move containers by handles or cases. Do not move containers from one area to another unless they are securely sealed. Keep container tightly sealed when not in use. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Store in original containers only. If the contents are leaking or material is spilled, follow these steps:

- Contain spill. Absorb with a material such as sawdust, clay granules or dirt.
- 2. Collect and place in suitable containers for disposal.
- 3. Wash area with soap and water to remove remaining pesticide.
- 4. Follow washing with clean water rinse.
- Place a leaking container in a plastic tub and transfer contents, as soon as possible, to an empty, original container.
- 6. Do not allow runoff to enter sewer or contaminate water supplies.
- 7. Dispose of waste as indicated below:

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 Container (rigid material; less than 5 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. 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 one-fourth 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. Dispose of empty container in a sanitary landfill or by incineration, or, if all by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Container (rigid material; 5 gallons or greater): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse a follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth full with water. Replace and tighten closures. Tip container on it 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. Dispose of empty container in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Refillable 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% full with water. Agitate vigorously or recirculate water with this pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.