

# 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:

5905-302

**14** 2009

NOTICE OF PESTICIDE:

Registration x Reregistration (under FIFRA, as amended) Term of Issuance: Unconditional

Name of Pesticide Product:

MIT-E-OIL

Name and Address of Registrant (include ZIP Code):

HELENA CHEMICAL COMPANY 225 Schilling Boulevard, Suite 300 Collierville, Tennessee 38017

ATTN: Scott A. Pace

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 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 basic Confidential Statement of Formula (CSF) dated March 27, 2009, is accepted and replaces all CSFs previously accepted for this product. As the registrant and the registration number of one of the claimed sources of active ingredient have changed, a revised CSF reflecting those changes must now be submitted.

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.

You must 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, please contact Dr. William Jacobs at 703-305-6406 or jacobs.bill@epa.gov.

Signature of Approving Official:

Meredith F. Laws, Chief
Insecticide-Rodenticide Branch Layle for

Registration Division (7505P)

Date:

## Label Changes for EPA Reg. No. 5905-302

The changes identified below must be made to the proposed label that you submitted for this product on March 27, 2009.

- 1. Change all references to the name of the product from "SOL OIL PLUS" to "MITE-E-OIL", reflecting your wishes indicated in the "Notification" of June 26, 2009.
- 2. In the statement of ingredients (page 1 of the label), footnote the active ingredient (Mineral Oil) with the phrase "Contains petroleum distillates."
- 3. Revise the text that appears in the box with the heading "HAZARDS TO HUMANS AND DOMESTIC ANIMALS" to read and appear as shown below.

#### **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.

4. Change the order of treatments listed under "FIRST AID" to:

IF IN EYES: ...
IF ON SKIN OR CLOTHING: ...
IF SWALLOWED: ...
IF INHALED: ...

Note that "IF ON SKIN OR CLOTHING:" is to replace "IF ON SKIN:".

5. To the box that contains the sentence "Have the product container with you ... treatment", add a second sentence that includes a telephone number for use in case of medical emergencies. The sentence should be formatted as indicated below.

You also may call 1-800-xxx-xxxx [insert full telephone number] for emergency medical treatment information.

6. Change the "**NOTE TO PHYSICIAN**:" to read as shown below.

**NOTE TO PHYSICIAN:** This product contains petroleum distillates and may pose an aspiration pneumonia hazard. Do not induce vomiting.

7. Replace the first paragraph under "PERSONAL PROTECTIVE EQUIPMENT (PPE)" with the text shown below.

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.

8. Revise the second and third paragraphs under "PERSONAL PROTECTIVE EQUIPMENT (PPE)" to read and appear as shown below.

# Mixers, loaders, applicators, flaggers, and other handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks, and
- Chemical-resistant gloves.

# See ENGINEERING CONTROLS for additional requirements.

- 9. In the second sentence of the "ENVIRONMENTAL HAZARDS" paragraph, replace "For terrestrial uses, do" with "Do". The introductory phrase is not needed, and might be confusing, because this product is not labeled for any aquatic uses.
- 10. Center the heading "DIRECTIONS FOR USE" and increase its type size so that it is very clear to readers that all text from "It is a violation of Federal law ... labeling" through the instructions for using the product on "WALNUTS Late Spring to Mid-Summer Only:" is part of the "DIRECTIONS FOR USE" section.
- 11. Reorganize and revise the "DIRECTIONS FOR USE" section according to the format shown below. Sentences and paragraphs that are truncated through use of ellipses (...) are to remain as they appear on the label submitted on March 27, 2009. Sentences and paragraphs that are written out fully typically include revisions that must be made. Note that the order in which subsections of the "DIRECTIONS FOR USE" will appear has been changed.

# **DIRECTIONS FOR USE**

It is a violation of Federal law ... labeling

Do not apply this product in a way ... regulation.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Keep container well ... heat.

**PESTICIDE DISPOSAL:** Wastes resulting from use ... facility.

**CONTAINER DISPOSAL:** [Revise this paragraph to incorporate information on whether containers are reusable and detailed instructions for rinsing containers, as outlined in PR Notice 2007-4 and 40 CFR §156 Subpart H. Note that different instructions will be needed for different categories of containers. When adding the text about reusability and rinsing, be sure to retain text regarding how to dispose of the container.]

## AGRICULTURAL USE REQUIREMENTS

Use this product in accordance with ... Standard.

Do not enter ... hours.

PPE required for early entry ...

... any waterproof material.

# NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply ... greenhouses. Do not enter or allow others to enter until sprays have dried.

#### SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, and relative humidity) and method of application (ground, aerial, or airblast) can influence pesticide drift. The applicator and grower must evaluate all factors and make appropriate adjustments when applying this product. The restrictions pertaining to wind speed, temperature inversions, and droplet size apply to all of the methods of application permitted for 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.

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

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

**Airblast Applications:** Turn off outward pointing nozzles at row ends and when spraying outer row. To minimize spray loss over the top in citrus applications, spray must be directed into the canopy.

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

<u>Boom Length:</u> The boom length must not exceed 75% of the wingspan or 90% of the rotor blade's diameter.

<u>Swath Adjustment:</u> When applications are made cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downward 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.

#### PRODUCT INFORMATION

MIT-E-OIL is a blend of refined photobland oils that functions as a contact insecticide and miticide. The surfactant/emulsifier components of MIT-E-OIL modify the wetting and deposition characteristics of the spray droplets to improve spray applications.

#### **USE RESTRICTIONS AND PRECAUTIONS**

The spray tank should be made free of any sulfur residue before using MIT-E-OIL for applications to foliage. Unless otherwise instructed by this label, do not combine sulfur sprays with MIT-E-OIL on foliage and, for plant safety, do not follow a previous application of sulfur or apply sulfur following MIT-E-OIL until at least 30 days have elapsed. If in doubt, spray a portion of one tree previously treated with sulfur, using 1 quart of MIT-E-OIL in 25 gallons of water. If sufficient time has not elapsed, foliar burn will show in several days. MIT-E-OIL can be used with registered label rates of other pesticides.

If temperatures have dropped below 32° F (including overnight lows), do not spray tree and vine crops until daytime temperatures have risen to above 35° F and are free of moisture due to melting frost or heavy dew.

Applications to trees weakened by disease, drought, driving winds, or high nitrogen may result in oil-caused injury.

For all applications to be effective, complete coverage is essential. Thorough inside- and outside-tree application is needed.

#### MIXING INSTRUCTIONS

- 1. Add enough water ... agitation.
- 2. Add nutrients and other ... tank. DO NOT add MIT-E-OIL before a uniform mixture is obtained.
- 3. Maintain agitation of the ... minutes.
- 4. Ensure that spray ... remain.

ALFALFA (Seed Crop Only): Use 1 quart of product per acre in a minimum of 20 gallons of water per acre for ground applications and in a minimum of 10 gallons water per acre for aerial applications, when used in combination, and at the labeled rates, with insecticides or miticides that are labeled for use with oil sprays. To increase the effectiveness of dessicants, apply 2 gallons of product per acre by air in a minimum of 10 gallons of water. This use is limited to herbicide/dessicant products that are labeled for alfalfa seed dessication. Spider Mites: use one quart of product per acre at the dilution rates indicated above.

ALMONDS, APRICOTS, CHERRIES, NECTARINES, PEACHES, PLUMS. PRUNES - Dormant or Delayed Dormant - Dilute spray: Brown Apricot Scale, Black Scale, San Jose Scale, Olive Scale (Parlatoria Scale), Oleander Scale, Frosted Scale, Italian Pear Scale, European Fruit Lecanium, Putnam Scale, Soft Brown Scale, other Scale Insects, Eggs of Aphids, Red Spider Mites, and Brown Mites use 1½ to 2 gallons in 300 to 600 gallons of water per acre. Concentrate Spray: use 4 to 6 gallons per acre in a minimum of 20 gallons of spray. Almonds and Apricots: European Red Mite, Brown Mite, and San Jose Scale – use 4 to 8 gallons per acre in a minimum of 20 gallons of spray. Spring or Summer Dilute Spray: Two-spotted Mites, Pacific Mites, European Red Mites, and Brown Mites – use 1 to 2 gallons in 300 to 600 gallons of water per acre. Spring or Summer Concentrate: use 4 to 6 gallons per acre in a minimum of 20 gallons of spray. Aerial Application: use at least 4 and no more than 6 gallons of product in a minimum of 20 gallons of spray. Plums and Prunes – Dilute Spray: Peach Twig Borer – use 1½ to 2 gallons per 100 gallons of water. Concentrate Spray: use 6 to 8 gallons per 20 to 125 gallons of water. Aerial Application: use 6 to 8 gallons per acre in a minimum of 20 gallons of spray.

**APPLES:** Rust Mite – use  $1\frac{1}{2}$  to 2 gallons of product for Delayed Dormant applications and 1 to  $1\frac{1}{2}$  gallons for Summer Use.

APPLES, PEARS – Dormant or Delayed Dormant - Dilute Spray: San Jose Scale, Pear Scale, Eggs of Aphids, Red Spider Mites, Rust Mites (Apples only – delayed dormant) – use 1½ to 2 gallons. Pears only: Delayed dormant: Pear Psylla: Dilute spray – use 2 gallons of product per 100 gallons of water. Concentrate spray – use 4-6 gallons in a minimum of 20 gallons of spray per acre. Concentrate Spray: Summer dilute spray: Two-spotted Spider Mites, Pacific Mites, and European Red Mites – use 1 to 1½ gallons diluted in 400 to 800 gallons of water. Concentrate spray – use no more than 4 gallons per acre in a minimum of 20 gallons of spray. Aerial application – use no more than 4-6 gallons of product in a minimum of 20 gallons of spray per acre. Concentrated Sprayers – Pears (California Only) – use 4 to 6 gallons in 90 to 120 gallons of water per acre

**Dormant (Washington and Oregon only):** Apples – Dilute spray for ... acre.

Note: Oil plus sulfur or lime sulfur ... period.

ASPARAGUS, BEANS, BEETS, CORN, SQUASH, TOMATOES, CUCURBITS, AND PEPPERS: Aphids, Mites, Beetle Larvae, Leafminers, Caterpillars – use 1 to 1½ gallons of product per 100 gallons of water.

AVOCADOS (HAAS VARIETY ONLY): Avocado brown mite - use 1 to 1½ gallons of product per 100 gallons of water. Apply as thorough coverage spray through late fall.

CITRUS (Citrus spp., Fortunella spp.) Florida Red Scale, Purple Scale, Soft Brown Scale, Black Scale, Whiteflies, Red Spider Mites, and Rust Mites – Concentrate Spray: Apply 2 gallons of product per acre if total spray volume is less than or equal to 125 gallons per acre. If total spray volume is greater than 125 gallons per acre, mix product in water at a 2% concentration, volume-for-volume. Control of severe insect infestations may require applying 3 gallons of product per acre.

**Notes:** Do not exceed 500 gallons per acre of total spray volume. Do not use within 8 weeks of harvest on Lemons. Do not use on Navel Oranges after September 1.

All Citrus Varieties: Do not use oil spray when freezing temperatures are expected within 24 hours of the application. Care should be taken in combining oil sprays with other miticides and insecticides due to the possibility of increased phytotoxicity when the combinations are applied over foliage. Consult a local Agricultural Extension Service agent for advice on specific combinations.

FIGS (Dormant or Delayed Dormant): Fig Scale – Dilute Spray – use 2 to 3 gallons of product per 100 gallons of water. Apply 300 to 600 gallons of spray mix per acre. Use 3 gallons of product per 100 gallons of water for severe infestations. Concentrate Spray – use 4 to 6 gallons of product in a minimum of 50 gallons of spray mix.

GRAPES (Dormant): Dilute Spray: Mealybug – Use ... coverage. Suppression of Grape and Variegated Leafhopper nymphs – use 1 to 1½ gallons or 1-3 gallons per acre concentrate. Mite suppression – use 1 to 2 gallons per acre concentrate. Narrow range oils such as MIT-E-OIL can temporarily affect surface bloom appearance without causing subsurface injury. When applied for leafhopper or mite suppression within 2 days of harvest, MIT-E-OIL should not be applied to grapes designated for fresh market.

**OLIVES:** Dilute spray: Parlatoria Scale, Oleander Scale, Olive Scale, Black Scale, and Spider Mites – use 1½ gallons of product in 400 to 500 gallons or water per acre. This product may be applied post-bloom (late May through June, when crawlers are present), in summer (July 15 through August), and post-harvest (October through November).

**PEARS:** Pear Psylla – Delayed Dormant – use 2 gallons per acre. Summer – use 1 to 1½ gallons per acre. Blister Mite – Delayed Dormant and Fall Spray – use 2 gallons per acre.

**PECANS:** Obscure Scale – Dormant: Dilute Spray – use ... acre.

**STRAWBERRIES:** Two-spotted Spider Mites – use product at 1.0% to 2.0% volume-to-volume in 60 gallons of water per acre with air-assisted low-volume ground application equipment or 300 gallons of water per acre with standard ground spray equipment. 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; and
- March 1 to June 30 in Monterey and Santa Cruz Counties.

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

Shade Trees\* and Shrubs, including Conifers (See Note), Deciduous Broadleaf Evergreens, and Woody Ornamentals: 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): Winter Dormant Period, as needed — use 2 to 4 gallons of product per 100 gallons of water. Summer (Foliar or Cover) as needed — use 1 to 3 gallons of product per 100 gallons of water. Note: This product may cause discoloration of Blue Spruce. Do not use on Conifers or Ferns that are not tolerant to oil sprays.

Ornamental Trees\*, Shrubs along city streets and other rights-of-way, including Conifers, Deciduous, and Broadleaf Evergreens: 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): Winter Dormant Period, as needed – use 2 to 4 gallons of product per 100 gallons of water. Summer (Foliar or Cover) as needed – use 1 to 3 gallons of product per 100 gallons of water.

Flowering and Foliage plants including Roses and other Flowering Shrubs: 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): Winter Dormant Period, as needed – use 2 to 3 gallons of product per 100 gallons of water. Summer (Foliar or Cover) as needed – use 1 to 2 gallons of product per 100 gallons of water.

Foliage Ornamentals and Bedding Plants: 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): Winter Dormant Period, as needed – use 2 to 3 gallons of product per 100 gallons of water. Summer (Foliar or Cover) as needed – use 1 to 2 gallons of product per 100 gallons of water

Christmas Trees: Aphids, Adelgids, Scales (Soft and Hard), and Spider Mites: use 2 to 4 gallons of product per 100 gallons of water. In summer, use 1 to 3 gallons of product per 100 gallons of water.

\*Oil removes the ... Spruce. Red Cedar and Douglas Fir have a tendency toward sensitivity. Do not spray ... sprays.

**Note:** Spray no more ... plants.

WALNUTS – Late Spring to Mid-Summer Only: Summer Stages of Frosted Scale, European Fruit Scale, San Jose Scale and other Soft-Shelled Scales, Red Spider Mites – use 2 to 4 quarts. Delayed Dormant: Black Scale, San Jose Scale, Olive Scale, Frosted Scale, Calico Scale, European Fruit Lecanium Scale, Red Spider Mite Eggs, and Walnut Aphid Eggs – Dilute Spray – use 3 gallons of product in 300 to 500 gallons of water. Foliar (fully expanded leaves): Spider Mites – use 4 gallons of product per acre in 200 to 400 gallons of water. Concentrate Spray: for delayed dormant and foliar sprays, apply in a minimum of 40 gallons of water per acre. Use oil only ... split

The reference to use of this product in combination with Ethion or Trithion on walnuts was deleted because there are no current tolerances for those chemicals on walnuts.

Note: The "STORAGE AND DISPOSAL" box may be retained within the "DIRECTIONS FOR USE" or moved so that it immediately precedes or immediately follows the "DIRECTIONS FOR USE".

- 12. Make the changes listed below to the "CONDITIONS OF SALE LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES" text.
  - a. Change the last sentence of the paragraph which begins with "The directions on this label" to read as shown below.

To the extent permitted by applicable laws, the Company makes no other warranties of any kind, expressed or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose.

b. In the first sentence of the next paragraph, change "The exclusive" to "To the extent permitted by applicable laws, the exclusive".

SOL OIL PLINES the Federal Insecticide, Fungicide and Rodenticide Act, As amended, for the INSECTICIDE-MITICIDESCRAME gistered under EPA Reg. No: 5905-302 **ACTIVE INGREDIENT:** 

Mineral Oil 90.00%

INERT INGREDIENTS: ......10.00% TOTAL ......100.00%

Petroleum Oil Min. Unsulfonated Residue - 96-98% Protected by U.S. Patent # 5,462,912

# KEEP OUT OF REACH OF CHILDREN CAUTION

# PRECAUTIONARY STATEMENTS HAZARD TO HUMANS & 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. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

#### FIRST AID

#### IF SWALLOWED:

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

## IF ON EYES:

- · Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
- Call a poison control center or doctor for treatment advice.

#### IF ON SKIN:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

### IF INHALED:

- · 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.

NOTE TO PHYSICIAN: This product contains petroleum distillate - vomiting may cause aspiration pneumonia.

See Inside Panel for Additional Precautionary **Statements** 

SN XXXX/XXXX

EPA REG. NO. 5905-302

**NET CONTENTS:** 

EPA EST NO.

**MANUFACTURED FOR HELENA CHEMICAL COMPANY** 225 SCHILLING BOULVARD, SUITE 300 COLLIERVILLE, TENNESSEE 38017

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A, B, C, D, E, F, G, or H on an EPA chemical-resistance category selection chart.

# Mixers, loaders, applicators, flaggers, and other handlers must wear:

- Long-sleeve shirt and long pants, 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 material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

# **USER SAFETY RECOMMENDATIONS** Users should:

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

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- 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.

#### **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)].

#### **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 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.

#### CHEMIGATION PROHIBITION

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

#### **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 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.

#### SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator and grower must evaluate all factors and make appropriate adjustments when applying this product.

#### WIND SPEED

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

## **DROPLET SIZE**

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

# GROUND SPRAY APPLICATIONS RELEASE HEIGHT

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

#### **WIND SPEED**

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

#### **DROPLET SIZE**

Apply as a medium or coarser spray (ASAE 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.

#### **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 of stable atmospheric conditions.

#### **AERIAL SPRAY APPLICATIONS**

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.

# **SWATCH ADJUSTMENT**

When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downward 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.

#### WIND SPEED

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

#### **DROPLET SIZE**

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

# **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 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, such as plants, 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 Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forest, nurseries, or greenhouses. Do not enter treated areas without protective clothing until sprays have dried.

#### STORAGE AND DISPOSAL

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

**STORAGE:** Keep container well sealed. Protect from excessive heat.

**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: 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.

SOL OIL PLUS is a special blend of refined phytobland oils that function as a contact insecticide and miticide. In addition, the surfactant/emulsifier system utilized in SOL OIL PLUS improves spray application by modifying the wetting and deposition characteristics of the spray droplets.

For foliage application, the spray tank must be free of any sulfur residue before using SOL OIL PLUS. Do not combine sulfur sprays with SOL OIL PLUS on foliage and do not follow a previous application of sulfur or apply sulfur following SOL OIL PLUS until sufficient time has elapsed for safety (at least 30 days). If in doubt, spray a portion of one tree previously treated with sulfur, using 1 quart to 25 gallons water. If sufficient time has not elapsed, burn will show in several days. When temperatures drop below 320 F (usually nighttime lows), do not spray tree and vine crops until daytime temperatures have warmed to a point above 350 F and are free from moisture due to melting frost or heavy dews. SOL OIL PLUS can be used with recommended rates of other pesticides. Application to trees weakened by disease, drought, driving winds or high nitrogen applications may result in oil injury.

## MIXING INSTRUCTIONS

- 1) Add enough water to the mixing tank for proper agitation.
- 2) Add nutrients and other pesticides. If dry pesticide products are used, mix the materials with water thoroughly so that they are completely dispersed in the mixing tank. DO NOT add **SOL OIL PLUS** before a uniform mixture is obtained.

- 3) Maintain agitation of the mix until the spray is applied. Flush any spray mix remaining in hoses back into the tank if the solution stands for more than 20 minutes.
- 4) Ensure that spray equipment is thoroughly clean so that residues from other applications do not remain.

For all applications to be effective, complete coverage is essential, necessitating a thorough inside and outside tree application.

ALFALFA (Seed Crop Only): Use 1 quart per acre in a minimum of 20 to 30 gallons of water per acre by ground application or a minimum of 10 to 15 gallons by air when used in combination and at the recommended label rates with insecticides or miticides that recommend the use of oil. To increase the effectiveness of desiccants, apply 2 gallons 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 per acre at the dilutions noted above.

ALMONDS, APRICOTS, CHERRIES, NECTARINES, PEACHES, PLUMS, PRUNES - Dormant or Delayed Dormant: Dilute spray: Brown Apricot Scale, Black Scale, San Jose Scale, Olive Scale (Parlatoria Scale), Oleander Scale, Frosted Scale, Italian Pear Scale, European Fruit Lecanium, Putnam Scale, Parlatoria, Soft Brown Scale, other Scale Insects, Eggs of Aphids, Red Spider Mites, Brown Mites - 1½ to 2 gallons in 300 to 600 gallons per acre. Concentrate spray: 4 to 6 gallons per acre in a minimum of 20 gallons of spray. Almond and Apricots: for the European Red Mite, Brown Mite, San Jose Scale - 4 to 8 gallons per acre in a minimum of 20 gallons of spray. Spring or Summer Dilute Spray: Twospotted, Pacific, European Red and Brown Mites: 1 to 2 gallons in 300 to 600 gallons of water per acre. Spring or Summer Concentrate: 4 to 6 gallons per acre in a minimum of 20 gallons of spray. Application by air: Use no more than 4-6 gallons of product in a minimum of 20 gallons of spray. Plums and Prunes: for Peach Twig Borer - 1½ - 2 gallons per 100 gallons of water. Concentrate spray: 6 - 8 gallons per 20 - 125 gallons of water. Application by air: 6 - 8 gallons in a minimum of 20 gallons of spray.

**APPLES:** Rust Mite: Delayed Dormant - 1½ to 2 gallons. Summer use - 1 to 1½ gallons.

APPLES, PEARS - Dormant or Delayed Dormant - Dilute Spray: San Jose Scale, Pear Scale, Eggs of Aphids, Red Spider Mites (Rust Mites, Apples only - delayed dormant) - 1½ to 2 gallons. Pears only: Delayed dormant. Pear Psylla - 2 gallons. Concentrate spray - use 4 to 6 gallons in a minimum of 20 gallons of spray per acre. Summer dilute spray: Twospotted Spider, Pacific and European Red Mites - 1 to 1½ gallons dilute in 400 to 800 gallons of water. Concentrate spray: use no more than 4 gallons per acre in a minimum of 20 gallons of spray. Application by air: use no more than 4 - 6 gallons of product in a minimum of 20 gallons of spray per acre. (Concentrated Sprayers - Pears (California Only) - 4 to 6 gallons in 90 to 120 gallons of water per acre).

Dormant: (Washington and Oregon only): Apples - Dilute spray for mites and San Jose scale - use 1 to 1½ gallons of oil plus sulfur or lime sulfur at the label recommended rate. Concentrate spray - use 4 to 6 gallons of oil per acre plus the label recommended rate of sulfur or lime sulfur in 20 to 100 gallons of spray per acre. Pears - Dilute Spray - Pear Psylla - use 1 to 1½ of oil plus sulfur or lime sulfur at the label recommended rate. Concentrate spray - use no more than five gallons of oil plus the label recommended rate of sulfur or lime sulfur in 20 to 100 gallons of spray per acre.

**NOTE:** Oil plus sulfur or lime sulfur can cause severe foliage and fruit bud injury if applied after the dormant period.

ASPARAGUS, BEANS, BEETS, CORN, CUCURBITS, PEPPERS, SQUASH, & TOMATOES: Aphids, Mites, Beetle Larvae, Leafminers, and Certain Caterpillars - Use 1 - 2 gallons/100 gallons of water.

AVOCADOS (HAAS VARIETY ONLY): Avocado Brown Mite - 1 - 1 1/2 gallons per 100 gallons with thorough coverage through late fall.

CITRUS (Citrus spp., Fortunella spp.) Florida Red Scale, Purple Scale, Soft Brown Scale, Black Scale, White Flies, Red Spider Mites, Rust Mites - Concentrate spray: 2 gallons per acre if total spray volume is less than or equal to 125 gallons per acre. If total spray volume is greater than 125 gallons per acre, use a 2% volume for volume. Control of severe insect infestation may require a higher rate not to exceed 3 gallons per acre.

**NOTE:** Do not exceed 500 gallons per acre total spray volume. Do not use within 8 weeks of harvest on Lemons. Do not use on Navel Oranges after September 1.

ALL CITRUS VARIETIES: Do not use oil when freezing temperatures are expected within 24 hours of the application. Care should be taken in combining oil sprays with certain miticides and insecticides, due to possible increased phytotoxicity when applied over foliage. See an Agriculture Extension Service agent for recommendations on special combinations.

FIGS: Fig Scale - Dormant or Delayed Dormant: Dilute Spray - use 2 to 3 gallons per 100 gallons in 300 to 600 gallons per acre water. Use 3 gallons for severe infestations. Concentrate spray - use 4 to 6 gallons in a minimum of 50 gallons of spray.

gallons plus the appropriate labeled rate of an insecticide registered for use on grapes for mealybug control in 200 to 300 gallons water per acre. Concentrate spray - use 1 to 2 gallons plus the appropriate labeled rate of an insecticide registered for use on grapes for mealybug control per acre in enough water for thorough coverage. Suppression of Grape and Variegated leafhopper nymphs suppression - 1 to 1½ gallons or 1 - 3 gallons per acre concentrate. Mite suppression - 1 - 2 gallons per acre concentrate. Narrow range oils such as SOL OIL PLUS can temporarily affect surface bloom appearance but will not cause subsurface injury. When applied for leafhopper or mite suppression near harvest (within 2 days) SOL OIL PLUS should not be applied to grapes for fresh market.

OLIVES: Dilute spray: Parlatoria, Oleander, Olive and Black Scales, Spider Mites - use 1½ in 400 to 500 gallons per acre water. May be used post bloom. (Late May through June when crawlers are present) Summer (July 15 through August) and Post-Harvest (October through November).

**PEARS:** Pear Psylla - Delayed Dormant - 2 gallons per acre. Summer Use - 1 to 1-1/2 gallons. Blister Mite - Delayed Dormant and Fall Spray - 2 gallons per acre.

**PECANS:** Obscure Scale - Dormant: Dilute Spray - use 3 gallons in 100 gallons water per acre. Concentrate spray - use 6 to 8 gallons per 20 - 125 gallons water per acre.

**STRAWBERRIES:** Twospotted Spider Mites - Use 1.0% to 2.0% volume to volume in 60 gallons of water/acre with air assisted low volume ground applicators or 300 gallons of water/acre with standard ground spray equipment. Application may be made during the winter months when plants are semi-dormant. Do not use oil 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 mite 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 minimize the problem, do not apply this product when warm temperatures, 75 degrees F and higher, 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.

SHADE TREES, SHRUBS, ORNAMENTALS, FLOWER AND FOLIAGE PLANTS, CHRISTMAS TREES
Shade Trees\* and Shrubs including Conifers (See Note), Deciduous Broadleaf Evergreens & Woody Ornamentals: Aphids, Adelgids, Bugs (immature), Certain Caterpillar, Eriophyid Mites, Gall Mites, Lace Bug, Leaf Beetle, Larvae, Leafminer, Mealybug, Psyllids (immature), Sawfly (larvae), Scales (immature), Spider Mites, Whiteflies (immature): Winter Dormant Period as needed - 2 to 4 gallons oil per 100 gallons water.

Summer (Foliar or Cover) as needed - 1 to 3 gallons oil per 100 gallons water. Note: May cause discoloration of Blue Spruce. Do not use on Conifers or Ferns not tolerant to oil sprays.

Ornamental Trees\*, Shrubs along city streets, other rights-of-way including Conifers, Deciduous and Broadleaf Evergreens: Aphids, Adelgids, Bugs (immature), Certain Caterpillar, Eriophyid Mites, Gall Mites, Lace Bug, Leaf Beetle Larvae, Leafminer, Mealybug, Psyllids (immature), Sawfly (larvae), Scales (immature), Spider Mites, Whiteflies (immature): Winter Dormant Period as needed - 2 to 4 gallons oil per 100

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gallons water. Summer (Foliar or Cover) as needed - 1 to 3 gallons oil per 100 gallons water.

Flowering and Foliage plants including Roses and other Flowering Shrubs: Aphids, Adelaids, Bugs (immature), Certain Caterpillar, Eriophyid Mites, Gall Mites, Lace Bug, Leaf Beetle Larvae, Leafminer, Mealybug, Psyllids (immature), Sawfly (larvae), Scales (immature), Spider Mites, Whiteflies (immature): Winter Dormant Period as needed - 2 to 3 gallons oil per 100 gallons water. Summer (Foliar or Cover) as needed - 1 to 2 gallons oil per 100 gallons water. Foliage Ornamentals & Bedding Plants: Aphids, Adelgids, Bugs (immature), Certain Caterpillar, Eriophyid Mites, Gall Mites, Lace Bug, Leaf Beetle Larvae, Leafminer, Mealybug, Psyllids (immature), Sawfly (larvae), Scales (immature), Spider Mites, Whiteflies (immature), Winter Dormant Period as needed - 2 to 3 gallons oil per 100 gallons water. Summer (Foliar or Cover) as needed - 1 to 2 gallons oil per 100 gallons water.

Christmas Trees: Aphids, Adelgids, Scale (soft & hard) (immature), Spider Mites: 2 to 4 gallons oil per 100 gallons water. Summer 1 to 3 gallons oil per 100 gallons water.

\*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 Walnut foliage. Do not use on Conifers or Firs not tolerant to oil sprays.

Note: Spray no more than 4 times during the growing season; use a 2 week minimum application interval. Do not spray when buds have fully opened and shoot elongation is occurring. 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 Leaf Plum. Keep away from open blooms bleaching and spotting has been observed with the open blooms of certain plants.

# WALNUTS - Late Spring to Mid-Summer Only:

Summer Stages of Frosted Scale, European Fruit Scale. San Jose and other Soft-Shelled Scale, Red Spider Mites - 2 to 4 quarts. The addition of one of the following phosphate insecticides aids in scale control. Trithion or Ethion, See label for recommended dosages, Delayed dormant: Black, San Jose, Olive, Frosted, Calico, European Fruit Leucanium Scales, Red Spider Mite Eggs and Walnut Aphid Eggs - Dilute Spray - use 3 gallons in 300 to 500 gallons. Foliar (Fully expanded leaves): Spider Mites - use 4 gallons per acre in 200 to 400 gallons of water. Concentrate Spray: for delayed dormant and foliar sprays, apply in a minimum of 40 gallons of water per acre. Use oil 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 split.

CONDITIONS OF SALE - LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES Read the Conditions of Sale - Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Chemical Company's election, one of the following:

- 1. Refund of the purchase price paid by buyer or user for product bought, or
- 2. Replacement of the product used

To the extent allowed by law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

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