# VISTASPRAY<sup>TM</sup> 470 SPRAY OIL

# **Active Ingredient:**

Mineral Oil*	98.5%
Other Ingredients	
TOTAL	
*Contains petroleum distillates.	
Minimum Unsulfonated Residue	98%

# KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.) See inside booklet for additional Precautionary Statements and Directions for Use

# See inside booklet for First Aid, additional Precautionary Statements and Directions for Use

**EPA Reg. No.** 90784-3 **EPA Est. No.** 041696-CA-004

> 090784-CA-001 066663-CA-001

Manufactured By

MarVista

Resource

P.O. Box 218 • Corcoran, CA 93212

FIRST AID				
If Swallowed	Call poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to by poison control center or doctor. Do not give any liquid to a person. Do not give anything to an unconscious person.			
If in Eyes	<ul> <li>Hold eye open and rinse slowly and gently with plenty of water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call poison control center or doctor for treatment advice.</li> </ul>			
If on Skin	Take off contaminated clothing. Rinse skin with plenty of water for 15 —20 minutes. Call 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 by mouth to mouth if possible.     Call poison control center or doctor for treatment advice.			
Have product container or label with you when calling a poison control center or doctor or going for treatment.  In case of poisoning, contact your Poison Control Center at 1-800-222-1222.				
NOTE TO PHYSICIAN This product 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.

# **Physical or Chemical Hazards**

Do not store, use or spill near heat or open flame. Do not weld, heat or drill container. Residue may ignite with explosive violence if heated sufficiently.

#### Personal Protective Equipment (PPE)

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

- 1. Long-sleeved shirt and long pants.
- 2. Chemical-resistant gloves made of barrier laminate, nitrile rubber ≥ 14mils, neoprene rubber ≥ 14mils, or Viton ≥ 14mils.
- 3. Shoes plus socks.

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other loundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the 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 thoroughly with soap and water after handling and 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.
- 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**

This product is 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 contaminate water when disposing of equipment washwater or rinsate.

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

#### **DIRECTIONS FOR USE**

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

Do not apply this product 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 State/Tribal agency responsible for pesticide regulation.

## **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It 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 and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water is:

- 1. Coveralls,
- 2. Chemical-resistant gloves made of barrier laminate, nitrile rubber ≥14mils, neoprene rubber ≥14mils, or Viton ≥14mils.
- 3. 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 (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

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

### **Spray Drift Management**

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

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

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

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

**Ground Application:** Apply using a nozzle height of no more than 4 feet above the ground or crop canopy. Applications must be consistent with the limitations for wind speed, temperature inversions, and droplet size indicated above.

Airblast Application: For airblast application, 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. Applications must be consistent with the limitations for wind speed, temperature inversions, and droplet size indicated above.

Aerial Application: Applications must be consistent with the limitations for wind speed, temperature inversions, and droplet size indicated above.

Release Height: For aerial application of agricultural products, do not release spray at a height more than 10 feet above the ground, the tops 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 unsprayed at the downwind edge of the treated field.

VistaSpray™ 470 Spray Oil is narrow range petroleum spray oil designed for use on stone fruits, nut crops, pome fruits, citrus, vine crops, tropical fruits and ornamentals as listed on this label as a foliar or dormant/delayed dormant application. Total coverage of all parts of plants is required for optimum results. Application rates for dilute sprays (greater than 150 gallons spray solution per acre) are listed as gallons of spray oil per 100 gallons of water per acre. Concentrate applications (usually from 20 to 150 gallons per acre) are based upon dilute spray conversion of rate per acre x highest volume applied per acre. Aerial applications are used only when weather conditions do not allow ground application. Apply directed dose by air in a minimum of 20 gallons per acre. Optimum spray gallonage per acre is based upon tree or plant size, planting density, and stage of growth.

## **Mixing Instructions**

Fill spray tank with ½ the required amount of water. Add micronutrients and other compatible pesticides. If dry products are used, start agitation and mix thoroughly with water before adding oil to the spray tank. Add spray oil and continue with vigorous agitation. VistaSpray™ 470 Spray Oil is formulated as a "fast break" spray oil, and will not stay in solution unless agitated constantly. Maintain agitation of the spray mixture until it has been applied. **DO NOT USE THIS MATERIAL IF IT DOES NOT EMULSIFY.** 

#### **Use Restrictions**

• DO NOT apply this product through any type of irrigation system.

#### **Summer Sprays**

- DO NOT COMBINE WITH SULFUR SPRAYS and DO NOT APPLY spray oil within 30 days before or after an application of sulfur. Application during foliage stage within 30 days of a sulfur application will result in phytotoxicity.
- DO NOT use on foliage closer than 60 days after or 90 days before using captan products.
- DO NOT MIX with insecticides or fungicides incompatible with oil. Consult your State Agricultural Extension Service for specific compatibilities.
- DO NOT APPLY to trees weakened by disease, drought, drying winds, or high nitrogen applications.
- DO NOT APPLY VistaSpray™ 470 Spray Oil prior to or during a period of excessively hot temperatures (> 90° F).
- MAINTAIN CONSTANT VIGOROUS AGITATION during application to keep spray oil and water in solution.
- MULTIPLE CONCENTRATE APPLICATIONS may cause plant injury or delayed bud development. Do not make double applications on the ends of
  crop rows when turning application equipment.

#### **Dormant Sprays**

- DO NOT COMBINE dormant spray oil with SULFUR or LIME SULFUR unless the mixture has been tested on the crop and the mixture has been shown to be safe. Oil and Sulfur or lime sulfur combinations SHOULD ONLY to be used on DORMANT CROPS.
- DO NOT USE VistaSpray™ 470 Spray Oil when temperatures are below 32° F (usually nighttime lows). Apply to crops when temperatures
  have warmed above 35° F and crop is free of moisture of melting frost or heavy dew.
- DO NOT MIX with insecticides or fungicides incompatible with oil. Consult your State Agricultural Extension Service for specific compatibilities.
- DO NOT APPLY to trees weakened by disease, drought, drying winds, or high nitrogen applications.
- MAINTAIN CONSTANT VIGOROUS AGITATION during mixing and application to keep spray oil and water in solution.
- CONCENTRATE APPLICATIONS can delay bud development.

### Spreader - Sticker on all Citrus Varieties

This product may be used as a spreader — sticker with a suitable insecticide or miticide at a rate not to exceed 1.0%. Do not use when freezing temperatures are expected. Care should be taken in combining oil sprays with certain miticides and insecticides due to possible increased phytotoxicity when applied on foliage. See Agricultural Extension Service for recommendations on special combinations.

#### **FRUIT, VINE AND NUT CROPS**

CROPS	PESTS	FOLIAR APPLICATION	DORMANT OR DELAYED DORMANT APPLICATION	FURTHER USE INSTRUCTIONS
APPLES, ALMONDS, APRICOTS, CHERRIES, NECTARINES, OLIVES, PEACHES, PEAR, PISTACHIOS, PLUMS, PRUNES, WALNUTS	San Jose Scale, Brown Apricot Scale, Italian Pear Scale, Parlatoria Scale, Oleander Scale, Pear Psylla, Aphids, Mites Parthenolecanium Soft Scale on pistachios	Dilute: Apply 200 - 800 gallons of spray solution per acre using 0.5 - 1.5 gallons of oil per 100 gallons of water.  Concentrate: 5 - 8 gallons per acre in minimum 50 gallons of water per acre	Dilute: Apply 200 - 800 gallons of spray solution per acre using 1 - 1.5 gallons of oil per 100 gallons of water. For apples and pears, apply from 2 - 4 gallons of oil per 100 gallons of water.  Concentrate: 5 - 8 gallons per acre in minimum 50 gallons per acre	Do not apply to oil sensitive varieties due to fruit russeting or phytotoxicity to plant foliage or wood. For use on pistachios, apply as a dormant and/or post harvest treatment. Apply at the rate of 100 to 400 gallons of finished spray mix per acre. For pistachios in AZ, apply 4 gallons of oil per acre. In CA, apply up to 6 gallons of oil per acre. Walnuts — check with local farm advisor regarding all applications to walnuts.
CITRUS (ORANGES, GRAPEFRUIT, LEMONS, LIMES AND OTHER CITRUS VARIETIES)	Red Scale, Yellow Scale, Purple Scale, Block Scale, Citricola Scale, Brown Soft Scale, Citrus Red Mite, Pacific Spider Mite, Citrus Bud Mite, Two-spotted Spider Mite	Dilute: Apply 500 - 2000 gallons of spray solution per acre using 1.2 - 1.4 gallons of oil per 100 gallons of water (in TX and FL maximum 1500 gallons of spray mix per acre).		For Oranges, Grapefruit, Limes and other citrus in Central California and in Southern California and Oxnard Plains - Apply May through September. Do not use on navel oranges after September 1.  For Lemons in Southern California — apply in April and May and/or September through December. In Coastal counties apply March through early November.

YOUNG	Mites	Concentrate: Apply 10 - 20 gallons per acre in a minimum of 50 gallons of water per acre. Spray droplets should be discharged into an air stream pattern of high velocity (above 100 mph) with sufficient volume to carry spray through the tree canopy. Ground speed should not exceed 1.5 mph.  Dilute: Apply 100 — 400		The higher specified dosages should be used for heavier infestations in early fall.  To aid in control of Red, Black, Yellow, or Purple Scale add a suitably labeled insecticide. Care should be taken in combining oil sprays with certain miticides and insecticides due to possible increased phytotoxicity when applied over foliage.  Do not exceed 159 pounds of active ingredient per acre (in a maximum of 1500 gallons of spray mix per acre) in applications to citrus in Florida or Texas. Do not exceed 212 pounds of active ingredient per acre (in a maximum of 2000 gallons of spray mix per acre) in applications to citrus in Colifornia.  Apply during spring, late summer, and
NON-BEARING CITRUS		gallons of spray solution per acre using 1.2 gallons of oil per 100 gallons of water.		fall months.
GRAPES (except in CA)	Mealybug	Apply using 100 - 300 gallons of spray solution per acre using 1 - 1.5 gallons per 100 gallons of water.  Concentrate: 1 gallon to a maximum of 3 gallons oil per acre in a minimum of 50 gallons of water per acre.		Apply with ground equipment only. Oil can temporarily affect surface bloom appearance but will not cause subsurface injury. Oil should not be applied within two days of harvest to grapes grown for fresh market. DO NOT use Propargite (Omite) within 40 days following oil application. DO NOT apply oil within 30 days of a Propargite (Omite) upplication. DO NOT combine with sulfur sprays past dormant stage. Applications made within 30 days before or affer sulfur application will result in phytotoxicity.
GRAPES (CA)	Mealybug	Dilute: Apply using 100 - 300 gallons of spray solution per acre using 4 - 6 gallons of oil per 100 gallons of water. (For post harvest Fall spray use only)	Apply using 100 - 300 gallons of spray solution per acre using 1 - 6 gallons of oil per 100 gallons of water plus the appropriate label rate of insecticide registered for use on grapes.	

CROPS	PESTS	FOLIAR APPLICATION	DORMANT OR DELAYED DORMANT APPLICATION	FURTHER USE INSTRUCTIONS
ORNAMENTALS & SHADE TREES (Conifers, Holly, Pyracantha, Sycamore, Hawthorn, Flowering Peach, Flowering Cherry, Apple, Roses, Magnolia, Dogwood, Oak, Privet, Birch)	Black Scale, Brown Apricot Scale, Oyster Shell Scale, San Jose Scale, Soft Brown Scale, Red Spider Mites and Eggs, Aphids, Adelgids, Eriophyd Mites, Gall Mites, Lace Bug, Leaf Beatle Iarvae, Leafminer, Mealybug, Psylids (immature), Sawfly, Whiteflies (immature)	Apply 100 - 250 gallons of spray solution per acre using 0.5 - 1.0 gallons of oil per 100 gallons of water.	2 - 3 gallons	Conifer applications to Blue Spruce and Blue Juniper varieties may cause discoloration. May couse injury to Arborvitue and other cedars. Do not use on conifers or other ornemental plants not tolerant to oil sprays. Do not use domant sprays on broadleaf evergreens such as Rhododendron, Cherry Laurel, Holly, Ivy, Azalea or Oregon Grape. In colder climates Cotoneaster, Barberry and Yews may be sensitive. Do not spray dormant sprays below 35° F. If handgun has not been used for twenty minutes or longer, recirculate back into tank until hose is flushed.  **Dormant Spray: Allow at least a 2-week interval between applications of dormant sprays between applications of dormant sprays. Do not spray dormant sprays when leaves are in obvious moisture deficit or plants are under stress. Reduce rate to 2 gallons/100 gallons of water for Fall dormant applications to only. American Red Oak, Japonese Black Pine, Dogwood, Weeping Cherry, Comelina Cherry, Crab Apple, Norway Maple, Pure Leaf Plum. Keep away from open blooms — sporting has been observed with oil use on open blooms of certain varieties.
Christmas Trees	Aphids, adelgids, Scales (soft and hard imature), Spider Mites	Apply using 50 - 150 gallons of spray solution per acre using 1 - 3 gallons per 100 gallons of water.	Apply using 50 - 150 gallons of spray solution per acre using 2 - 4 gallons per 100 gallons of water.	

CROPS	PESTS	FOLIAR APPLICATION	DORMANT OR DELAYED DORMANT APPLICATION	FURTHER USE INSTRUCTIONS
HOPS (except in CA)	Hop Powdery Mildew	Apply using 50 - 150 gallons of spray solution per acre using 1 — 2 gallons per 100 gallons of water.		Use 50 - 150 gallons of spray per acre depending on plant size to achieve thorough coverage. Apply with ground equipment only. Note: DO NOT use Propargite (Omite) within 40 days following an oil application. DO NOT apply oil within 30 days of a Propargite (Omite) application. DO NOT combine with suffur sprays. Applications made within 30 days before or after suffur applications will result in phytotoxicity.
FIGS	Fig Scale		Dilute: Apply using 100 - 300 gallons of spray solution per acre using 2 - 3 gallons per 100 gallons of water. Concentrate: Apply 3 gallons per acre.	For dormant or delayed dormant only.
KIWIFRUIT (California only)	Latania Scale, Greedy Scale, Oleander Scale, San Jose Scale		Concentrate: Apply 4 - 6 gallons per acre in a minimum of 100 gallons of water per acre.	Use the 6-gallon rate where scale popula- tions are high. Do not apply after budbreak. Do not use on weak or stressed vines, or where soil moisture is inadequate.

# Storage and Disposal

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

**PESTICIDE STORAGE:** Keep container closed when not in use. Protect from freezing. Keep in shade. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent.

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

#### **CONTAINER HANDLING:**

**Nonrefillable Container (five gallons or less):** 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

**Nonrefillable Container (greater than five 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. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

**Refillable Container:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

# FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK, OR FIRE), CALL INFOTRAC AT 1-800-535-5053.

#### NOTIC

MAR VISTA RESOURCES LLC WARRANTS THAT THIS PRODUCT CONFORMS TO THE CHEMICAL DESCRIPTION ON THE LABEL THEREOF AND IS REASONABLY FIT FOR THE PURPOSE STATED ON SUCH LABEL ONLY WHEN USED IN ACCORDANCE WITH THE DIRECTIONS FOR USE. IT IS MINOSSIBLE TO ELIMINATE ALL RISKS INHERENTLY ASSOCIATED WITH THE USE OF THIS PRODUCT. CORD NULLY, INFERENTLY RESOURCES OF OTHER MINISTRODED CONSEQUENCES MAY RESULT BECAUSE OF SUCH HACKDES AS WEATHER CONDITIONS, PRESENCE OF OTHER MATERIALS, OR THE MANNER OF USE OR APPLICATION, ALL OF WHICH ARE BEYOND THE CONTROL OF MAR VISTA RESOURCES LLC. TO THE EXTENT CONSISTENT WITH APPLICABLE LAWS, IN NO CASE SHALL MAR VISTA RESOURCES LLC. TO THE EXTENT CONSISTENT WITH APPLICABLE LAWS, ALL SILD HE RESOURCES LLC. TO THE EXTENT CONSISTENT WITH APPLICABLE LAWS, ALL SILD HE RESOURCES THE WITH A PRODUCT. TO THE EXTENT CONSISTENT WITH A PPLICABLE LAWS, ALL SILD HE RESOURCES WERE ALL SHALL BE ASSILIATED BY THE RIVER.

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