



# 440 Supreme Spray Oil

For Use In Organic Crop Production

ACTIVE INGREDIENT:	BY WT.
Mineral Oil.....	99.00%
<b>INERT INGREDIENTS</b> .....	<b>1.00%</b>
<b>TOTAL</b> .....	<b>100.00%</b>
Contains petroleum distillates	
Unulfonated Residue .....	95.00%
Aromatic Composition ASTM D2140 .....	0.00%

EPA REG. NO. 7001-7781 EPA EST. NO. 8917-CA-027



Listed by the Organic Materials Review Institute (OMRI) for use in production of organic food and fiber

## KEEP OUT OF REACH OF CHILDREN CAUTION

### FIRST AID

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor.</li> <li>• Do not give ANY liquid to the person.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, continue rinsing.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>

**NOTE TO PHYSICIAN:** Contains petroleum distillates. Vomiting may pose aspiration pneumonia. FOR MEDICAL EMERGENCY INVOLVING THIS PRODUCT, CALL: 1800-228-5635, EXT. 136 OR CALL COLLECT, 612-851-8180, EXT. 136.

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed or absorbed through skin or inhaled. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate, nitrile rubber, neoprene rubber or viton. If you want more options, follow the instructions for category E on the 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.

Follow manufacturer's instruction for cleaning/maintaining PPE. If no such instructions for washables exists, 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.

**Engineering Controls Statements:** When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with 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. Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticide [40 CFR 170.240(d)(6)].

### USER SAFETY RECOMMENDATIONS

Users should:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. User should 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.

### PHYSICAL OR CHEMICAL HAZARDS

Do not weld, heat or drill this container. Residues may ignite with explosive violence if heated sufficiently.

NET CONTENTS: \_\_\_\_\_ GALLONS \_\_\_\_\_ LITERS



Manufactured in U.S.A. for:  
J. R. Simplot Company • P.O. Box 198, Lathrop, CA 95330

## 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.

## 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 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 workers entry into treated areas during the restricted entry interval 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 soil, or water, is: coveralls, shoes plus socks, and chemical-resistant gloves made of any waterproof material.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call collect: CHEMTREC 1-800-424-9300

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

**PESTICIDE DISPOSAL:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) 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. If recycling is not available, puncture container and dispose of it in a sanitary landfill or by other procedures approved by State and local authorities.

## ENVIRONMENTAL HAZARDS

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Do not apply directly to water, 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.

## PRECAUTIONS AND RESTRICTIONS

- 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.
- Do not apply this product through any type of irrigation system.
- Do not apply if this product will drift to food forage or other crops that might be damaged.
- For applications, the spray tank must be free of any sulfur residue before using PHT 440 Supreme Spray Oil. Do not combine this product with any type of sulfur spray. Do not apply PHT 440 Supreme Spray Oil after a sulfur application until sufficient time has passed for safety (at least 30 days). Do not apply sulfur after an application PHT 440 Supreme Spray Oil until sufficient time has passed for safety (at least 30 days). If doubts exist, spray PHT 440 Supreme Spray Oil mixture on a portion of one tree that was treated with sulfur. If no burn is noted in several days, enough time has passed. Do not spray when temperatures are above 95° F or when temperatures drop below 35° F. Do not use on foliage closer than 60 days after or 90 days before using Captan or Folpet products.
- PHT 440 Supreme Spray Oil must be diluted before an application is made.
- DO NOT MIX with insecticides or fungicides incompatible with oil. Consult your State Agricultural Extension Service or Fieldman for specific compatibilities.
- Application to trees weakened by disease, drought, drying winds or high nitrogen applications may result in injury to the trees.

## MIXING DIRECTIONS

Check to make sure this product will emulsify. If the mixture is not milky after agitation, do not use this product. Do not use this material if it does not emulsify.

With the agitator running, start filling the spray tank with water. Add wettable powders or other products when the tank is one third full and always before adding PHT 440 Supreme Spray Oil. When the tank is one half full and with good agitation, add the proper amount of PHT 440 Supreme Spray Oil, then fill to the desired volume. Constant agitation must be maintained during mixing and application.

This product may be used as a carrier for appropriate insecticides and fungicides which are registered for use on deciduous fruits and nuts and which can be applied to give a uniform spray. For recommendations on timing and combinations with PHT 440 Supreme Spray Oil, Consult your local Agricultural Extension Service or Fieldman.

Use only in spray machines with powerful positive agitation. Keep agitator running at all times during spray operations.

This product is formulated as a "fast break" spray oil and will not stay in solution unless agitated constantly.

## ORCHARD CONCENTRATE APPLICATION:

Apply according to rates given in the table for each crop. All quantities of spray solution are for mature trees and vines with normal foliage cover. Reduce quantities proportionally for smaller immature trees and vines. Use only on crops listed on this label. Special concentrate spray equipment is necessary for this application.

**RESTRICTION:** Use efficient equipment of the proper type. Do not spray during or immediately prior to hot or freezing weather (over 95° or under 35°F), hot dry wind, rain or other unsuitable conditions; avoid over spraying or double spraying. Spray plants only when in vigorous condition and when their moisture condition is suitable.

## SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind directions, 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.

### Ground:

**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.

### Aerial:

**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 crosswind, 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.

**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:

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 or stable atmospheric conditions.

**ALMONDS, APRICOTS, CHERRIES, NECTARINES, PISTACHIOS, PEACHES, PLUMS AND PRUNES:** *(Directions for use on plums and prunes in California's Sacramento Valley can be found in the table following this one):*

PEST	APPLICATION RATE & TIMING	COMMENTS
Black Scale, Brown Soft Scale, European Fruit Lecanium Scale, Frosted Scale, Olive Scale, San Jose Scale, European Red Mite Eggs, Aphid Eggs, Brown Mite Eggs, Fruittree Leafroller Eggs	<b>DORMANT AND DELAYED DORMANT:</b> Use 1 to 2 gallons per 100 gals of water at 300 to 500 gals per acre. (Concentrate Spray: Use 5 to 7 gals per acre in a minimum of 20 gals by air or 100 gals by ground of water per acre).	Preferred timing of application for European Fruit Lecanium Scale and European Red Mite eggs is green up to Delayed Dormant and for San Jose Scale is Dormant, Green tip to delayed dormant.
Terrapin Scale	<b>DELAYED DORMANT:</b> Use 2 to 3 gallons per 100 gals of water at 300 to 600 gals per acre. (Concentrate Spray: Use 4 to 6 gals per acre in a minimum of 20 gals by air or 100 gals by ground of water per acre).	
Cottony Peach Scale	<b>DORMANT:</b> Use 2 to 3 gallons per 100 gals of water at 300 to 600 gals per acre. (Concentrate Spray: Use 4 to 7 gals per acre in a minimum of 20 gals by air or 100 gals by ground of water per acre).	
Two Spotted Spider Mites, Pacific Mite, European Red Mite, Brown Mite	<b>FOLIAR SPRAY:</b> Use 1/2 to 1 1/2 gals per 100 gals of water at 300 to 600 gals per acre. (Concentrate Spray: Do not use more than 4 gals per acre in a minimum of 20 gals by air or 100 gals by ground of water per acre).	Certain varieties of plums and prunes may be injured by all sprays, check for tolerance prior to treatment.
White Peach Scale on Peaches: Only for use in Georgia, Florida, South Carolina, North Carolina and Alabama.	<b>DORMANT:</b> Use 1 1/2 to 2 gallons per 100 gals of water at 300 to 600 gals per acre. (Concentrate Spray: Use 5 to 7 gals per acre in a minimum of 20 gals by air or 100 gals by ground of water per acre).	Apply before buds begin to swell in the spring. Make 2 applications 7 to 14 days apart, according to local recommendations, during the dormant period.

**PLUMS AND PRUNES:** (*Sacramento Valley of California Only*):

**Restriction: For Aerial Application - Apply by air only when soil conditions do not permit regular ground application.**

PEST	APPLICATION RATE & TIMING	COMMENTS
Black Scale, European Fruit Lecanium Scale, San Jose Scale, Olive Scale, Frosted Scale, Mealy Plum Aphid Eggs, Leaf Curl Plum Aphid Eggs, Brown Mite Eggs, European Red Mite Eggs	<b>PRE-BLOOM WHEN FRUIT BUDS SHOW GREEN</b> <b>TIPS:</b> Use 1 1/2 to 2 gal per 100 gals of water at 300 to 600 gals per acre. (Concentrate Spray: Use 4 to 6 gals per acre in a minimum of 20 gals by air or 100 gals by ground of water per acre).	Application at this time is preferred.
Two Spotted Spider, Pacific Spider, European Red Mite, Brown Mite	<b>FOLIAR SPRAY:</b> Use 1/2 to 1 gal per 100 gals water at 300 to 600 gals per acre. (Concentrate Spray: Use 4 gals maximum per acre in a minimum of 20 gals by air or 100 gals by ground of water per acre).	Oil sprays may injure certain varieties of plums and prunes, check for tolerance prior to treatment.

**CITRUS:** (*California Only*):

**Lemons, Grapefruit, and Oranges (Navel and Valencia), Limes, Tangerines, Tangelos, and other citrus varieties.**

**RESTRICTIONS**

- Do not apply oil sprays when trees show stress.
- Do not apply prior to or during a period of excessively high temperatures above 95°F. (85° to 95°F on the coast)
- Low volume spray (LV): Apply with droplet depositions achieved on all interior and exterior parts of the tree using 20 to 100 gallons of spray solution per acre.
- Thorough coverage spray (TC): Applications should achieve a uniform film wetting of all portions of the tree at 250 to 2000 gallons of spray solution per acre. The total volume is dependent of the size of the trees.
- Consult with your local University of California Cooperative Extension Specialist or Fieldman for proper timing and spray volumes.

PEST	APPLICATION RATE & TIMING	COMMENTS
Mites -Citrus Bud, Citrus Flat, Citrus Red, Citrus Rust  Scales -Black, Brown, Soft, California Red, Citricola Purple, Yellow, Red	Central California: Apply 0.5 to 1.4 gals per 100 gals of water as thorough coverage spray (TC). Alternately, use a low volume spray (LV) to apply 2.5 to 15 gals per acre.	Do not apply to lemons within 60 days of harvest if lemons are to be sweated. For lemons and limes, make applications in June through September. For grapefruits make applications in August through September. For oranges, make applications on navels and Valencias - July through August and on tangelos, tangerines, and other citrus varieties - July through August. For navels and Valencias, treatment can be made from Feb 15 to 50% bloom, to avoid injury, use low concentration (1.0%). On navel oranges, do not apply during or after color break.

## CITRUS: (California Only): Continued

PEST	APPLICATION RATE & TIMING	COMMENTS
Mites -Citrus Bud, Citrus Flat, Citrus Red, Citrus Rust Scales -Black, Brown, Soft, California Red, Citricola Purple, Yellow, Red	Oxnard Plains Area: Apply 0.5 to 1.4 gals per 100 gals of water as thorough coverage spray (TC). Alternately, use a low volume spray (LV) to apply 1 to 10 gals per acre.	For lemon, grapefruits, oranges (navels and Valencias), limes, tangelos, tangerines, and other citrus varieties, make applications as needed throughout the year. On navels, do not apply during or after color break. Do not apply to lemons within 60 days of harvest.
Maximum of 212 pounds active ingredient per acre (maximum 2000 gallons of spray mix per acre) in California.		

## APPLES & PEARS

PEST	APPLICATION RATE & TIMING	COMMENTS
San Jose Scale, Italian Pear Scale  Leaf Roller Eggs  Pear Psylla	<b>DORMANT AND DELAYED DORMANT:</b> Apply 1 1/2 to 2 gallons per 100 gallons of water in a minimum of 250 gallons per acre. (Concentrate Sprays: do not use more than 6 gals per acre in a minimum of 20 gals by air or 100 gals by ground of water per acre). <b>DELAYED DORMANT:</b> Apply 2 gallons per 100 gallons of water at 300 to 500 gals per acre. (Concentrate Spray: Apply 5 to 6 gals per acre in a minimum of 20 gals by air or 100 gals by ground of water per acre). Apply 1 gallon per 100 gallons of water at 300 to 600 gals per acre. (Concentrate Spray: Apply 3 to 6 gals per acre in a minimum of 20 gals by air or 100 gals by ground of water per acre).	An application of an insecticide labeled for use on apples and pears will improve scale control.
Red Mites, San Jose Scale, Italian Pear Scale (immature summer stage of scales)	<b>Summer Application (post harvest):</b> Apply 1 gallon per 100 gallons of water at 300 to 600 gals per acre.	An application of an insecticide labeled for use on apples and pears will improve summer scale control.

## AVOCADOS

PEST	APPLICATION RATE & TIMING	COMMENTS
Avocado Brown Mite, Thrips	Use 1 to 4 gals per 100 gals of water for thorough coverage in 400 to 3000 gals per acre. (Concentrate Spray: Use 4 to 15 gals per acre in 50 to 100 gals of water per acre). Do not exceed 30 gallons of oil per acre per application.	Apply through late fall. Consult with your local University of California Cooperative Extension Service or Fieldman for proper timing and application parameters. When an application of oil is more than 2% v/v, apply to a small test area and observe.

## GRAPES (Dormant)

PEST	APPLICATION RATE & TIMING	COMMENTS
Mealybugs	<b>DORMANT:</b> Use 1 to 2 gallons per 100 gals of water per acre with thorough coverage. Do not exceed 300 gals per acre per application.	For improved control tank mix with a registered insecticide.

## KIWI

PEST	APPLICATION RATE & TIMING	COMMENTS
Latonia Scale, Oleander Scale, San Jose Scale	<b>DORMANT:</b> Apply 4 to 6 gallons per treated acre. Apply in a minimum 100 gallons of water per acre.	Do not apply after bud break. Use the higher rate when scale populations are high.

## OLIVES

PEST	APPLICATION RATE & TIMING	COMMENTS
Parlatoria Scale, Oleander Scale, Black Scale	Apply 1 1/2 gallons per 100 gallons of water as a dilute spray in 400 to 800 gallons of water per acre.	Apply prebloom or post bloom up to buckshot. Do not apply any oil between Aug 20 and harvest to Olives used for Spanish or green-ripe processing because of the risk of fruit spotting.

## PECANS

PEST	APPLICATION RATE & TIMING	COMMENTS
Scales, Aphid Eggs, Mite Eggs	Apply 2 to 3 gallons in 100 gallons of water using minimum of 200 gallons water per acre. (Concentrate Spray: Apply 6 to 8 gallons per acre in a minimum of 20 gals by air or 100 gals by ground of water per acre).	Apply from late February up to bud break.

## WALNUTS

PEST	APPLICATION RATE & TIMING	COMMENTS
Brown Apricot Scale, San Jose Scale, Olive Scale, Oleander Scale, Frosted Scale, Italian Pear Scale, European Fruit Lecanium, Putnam Scale, Brown Soft Scale, Red Spider Mites, Aphid Eggs	<b>DELAYED DORMANT (as buds begin to swell):</b> Apply 1 gallon per 100 gallons of water. Apply as a dilute spray in 400 to 3,000 gallons per acre. (As a concentrate spray: Use 4 to 6 gallons in a minimum of 100 gals of water per acre).	Oils must not be used on walnuts during the dormant season between bud break and shoot elongation, or on drought stressed trees.
Red Spider Mites	<b>Summer Use:</b> Apply 1 1/2 to 2 gallons per 100 gallons of water. Apply as a dilute spray in 400 to 3,000 gallons per acre. (As a concentrate spray: Use 4 to 6 gallons in a minimum of 100 gals of water per acre).	Use only on trees that have not suffered from lack of moisture during the growing season. Do not apply if the temperature will exceed 90°F at or following application.
Brown Apricot Scale, San Jose Scale (summer stage)	<b>Summer Use:</b> Apply 1 gallon per 100 gallons of water. Apply as a dilute spray in 400 to 3,000 gallons per acre.	Do not apply after husk split. Do not apply if the temperature will exceed 90°F at or following application.

## CONDITIONS OF SALE AND WARRANTY

1. J.R. Simplot Company warrants that this material conforms to the chemical description on the label and is reasonably fit for use as directed hereon. To the extent consistent with applicable law, J.R. Simplot Company neither makes, nor authorizes any agent or representative to make any other warranty of fitness or of merchantability, guarantee or representation, expressed or implied concerning this material.

2. Critical and unforeseeable factors beyond the control of J.R. Simplot Company prevent it from eliminating all risk in connection with the use of chemicals. Such risks include, but are not limited to, damage to plants and crops to which the material is applied, lack of complete control, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit for the uses stated hereon and even though label directions are followed. Buyer and user acknowledge and assume all risks and liability (except those assumed by J.R. Simplot Company under 1 above) resulting from handling, storage, and the use of this material.

440\_supreme\_spray\_oil\_11-04-11