

# Blocover ° 55



ACTIVE INGREDIENT:		By Wt.
Mineral Oil*		98.00%
OTHER INGREDIENTS:		2.00%
	TOTAL	100.00%
*Contains petroleum distillates		
Unsulphonated Residue 98.00% (minimum)		
Aromatic Composition by ASTM D2140 0.0%		

## KEEP OUT OF REACH OF CHILDREN CAUTION

See Below for Additional Precautionary Statements.

Have the prod treatment.	FIRST AID uct container or label with you when calling a poison control center or doctor or going for
If swallowed:	<ul> <li>Immediately call a poison control center or doctor.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give any liquid to the person.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If on skin or clothing:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If inhaled:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>

**NOTE TO PHYSICIAN:** Petroleum distillate poses aspiration pneumonia hazard. Only minor irritation should be expected from any type of exposure other than pulmonary aspiration. Ingestion may result in some gastroenteritis and mild diarrhea.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565.

EPA REG. NO. 34704-809 EPA EST. NO.11800-CA-001 NET CONTENTS 30 GALS. (113.5 L)

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND 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. This product is a potential skin sensitizer. 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.

#### **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 E on the EPA chemical resistance category selection chart.

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

- Long-sleeved shirt and long pants,
- Shoes plus socks, and
- Chemical-resistant gloves made of barrier laminate, nitrile rubber, neoprene rubber or viton.

**User Safety Requirements:** Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent 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 Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (6)].

#### **USER SAFETY RECOMMENDATIONS**

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon
  as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters.

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

#### **DIRECTIONS FOR USE**

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

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. Aerial application of this product is prohibited.

#### 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 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 soil or water, is:

- Coveralls.
- Shoes and socks, and
- Chemical-resistant gloves made of any waterproof material.

#### **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

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

#### 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, 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 EQUIPMENT 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 (ASABE standard 572), and the minimum volume mean diameter (VMD) for spinning atomizer nozzles.

## **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.

#### MIXING DIRECTIONS

Use only in equipment with sufficient agitation to keep spray thoroughly mixed. Be sure tank is clean. With agitator running, start filling tank with water; add oil when tank is about 1/2 full. Pump this mixture through the overflow and back into tank for about two minutes. If this mixture turns white, it indicates good emulsification. Fill the tank with water, adding other desired materials as tank is filling. If wettable powders are used, add and thoroughly mix before adding oil. Observe all cautions and limitations on labeling of all products used in mixtures. Keep agitator running at all times. If an injector is used, first add 25.0 to 50.0 gallons of water to tank

with engine running to provide good pressure. Put injector suction tube into the measured amount of spray oil, opening injector valve to allow the oil to be sucked into the tank, then fill the tank with water.

#### DO NOT USE THIS MATERIAL IF IT DOES NOT EMULSIFY.

#### **USE LIMITATIONS AND PRECAUTIONS**

Preharvest Interval - This product may be used up to the day of harvest.

To ensure thorough coverage, dilute applications (greater than 150 gallons of spray solution per acre) should be used. Concentrate applications (usually from 20.0 to 150 gallons of spray solution) may reduce the coverage and thus the effectiveness. Application volumes depend on the crop type, crop size and target pest.

Adjust the spray volume to obtain the best coverage without runoff. Extreme care should be taken when using concentrate sprays as the potential for enhanced crop phytotoxicity is increased. A concentrate application can provide satisfactory results as long as the spray unit is properly engineered, calibrated and operated.

**Note:** Use efficient equipment of the proper type. Avoid spraying during or immediately prior to hot or freezing weather (over 95 °F or under 32 °F), hot dry winds, rain or other unsuitable conditions; avoid over spraying or double spraying. Plants should be sprayed only when in vigorous condition and when their moisture condition is suitable. Before using, make certain spray tank is free of sulfur residues. Do not apply sulfur within 30 days except in the Northwest (Oregon and Washington) where it may be used in combination on Pears as a Post Harvest (after old fruit is off the tree), Dormant and Delayed Dormant (before the scales slip, or at or prior to bud swell) treatment and on Apples prior to or up to the Delayed Dormant (1/2 inch green) period. In areas west of the Continental Divide do not apply to captan treated trees within 90 days after or 60 days before this oil. In areas east of the Continental Divide do not apply to captan treated trees within 10 to 14 days before and after this oil. If in doubt, spray a portion of one tree previously treated with sulfur or captan using 1.0 quart to 25.0 gallons water. Burn will show in several days if sufficient time has not elapsed.

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

A period of 14 days must elapse before any of the following chemicals are used before or after an application of this product: anilazine (Dyrene), chlorothalonil (Bravo®), dicloran (Botran®), dicofol (Kelthane®), dinocap (Dikar™, Karathane®), permethrin (Ambush®, Pounce®).

Do not use chlorothalonil (Bravo) or dimethoate (Cygon®) in a spray program with this product on Grapes, Ornamentals and Strawberries. Do not use dicofol (Kelthane) in a spray program with this product on Ornamentals and Strawberries. Do not use propargite (Omite®) with an oil spray or within 30 days before or after an oil spray.

## FRUIT AND NUT CROPS

#### **APPLES AND PEARS:**

PESTS	APPLICATION RATE & TIMING	COMMENTS
APPLES AND PEARS:	DORMANT OR DELAYED DORMANT:	
European fruit lecanium scale	Use 1.0 to 2.0 gal/100 gal of water at	
European red mite eggs	100 to 800 gal/A.	
Olive scale	(Concentrate Spray: Use 3.0 to 8.0	
San Jose scale	gal/A in a minimum of 20.0 to 100	
	gal water/A.)	
European red mite	FOLIAR SPRAY (Post Bloom):	
Pacific red mite	East of the Mississippi: Use 1.0 qt	
Two-spotted spider mite	to 1-1/2 gal/100 gal of water at	
	100 to 800 gal/A. <b>Do not</b> exceed	
	more than 1-1/2 gal/A/application	
	for SUMMER treatments.	
	(Concentrate Spray: <b>Do not</b> exceed more	
	than 1-1/2 gal/A per application.	
	Apply a minimum of 50.0 gal water/A.)	
	West of the Mississippi: Use 1.0 qt to	
	1-1/2 gal/100 gal of water at 100 to 800	
	gal/A.	
	(Concentrate Spray: <b>Do not</b> exceed more	
	than 1-1/2 gal/A/application. Apply a	
	minimum of 20.0 to 100 gal water/A).	
APPLES ONLY:	DORMANT OR DELAYED DORMANT:	
Apple aphid eggs	Use 1.0 to 2.0 gal/100 gal of water at	
Rosy apple aphid eggs	100 to 800 gal/A.	
riody appro apma dygo	(Concentrate Spray: Use 3.0 to 8.0 gal/A	
	in a minimum of 20.0 to 100 gal water/A.)	
Apple red bug	GREEN TIP TO DELAYED DORMANT:	
Fruit tree leafroller	Use 1.0 to 3.0 gal/100 gal of water at	
Scurfy scale	100 to 800 gal/A.	
courty could	(Concentrate Spray: Use 3.0 to 12.0 gal/A	
European red mite	in a minimum of 20.0 to 100 gal water/A.)	Delayed dormant preferred
Forbes scale	DORMANT, GREEN TIP TO DELAYED	Bolay ou dominant prototrou
San Jose scale	<b>DORMANT:</b> Use 1.0 to 2.0 gal/100 gal	
Carr 6000 Coard	of water at 100 to 800 gal/A.	
	(Concentrate Spray: Use 3.0 to 8.0 gal/A	
	in a minimum of 20.0 to 100 gal	
	water/A.)	
PEARS ONLY:	DORMANT: Use 1.0 to 2.0 gal/100 gal	Apply before eggs are laid.
Pear psylla	of water at 100 to 800 gal/A.	Tryly bototo oggo ato lala.
r our poyna	(Concentrate Spray: Use 3.0 to 8.0 gal/A	
	in a minimum of 20.0 to 100 gal	
	water/A.)	
Fruit tree leafroller	DORMANT: Use 1.0 to 3.0 gal/100 gal	
Pear leaf blister mite	of water at 100 to 800 gal/A.	
ו טמו וטמו טווסנטו וווונט	(Concentrate Spray: Use 3.0 to 12.0 gal/A	
	in a minimum of 20.0 to 100 gal water/A.)	
	iii a miiliiiiuiii di 20.0 to 100 yai watei/A.)	

ALMONDS, APRICOTS, CHERRIES, NECTARINES, PEACHES, PISTACHIO, 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
Aphid eggs	DORMANT AND DELAYED DORMANT:	Preferred times of application for
Black scale	Use 1.0 to 3.0 gal/100 gal of water at	European fruit lecanium scale and
Brown mite eggs	300 to 600 gal/A.	European red mite eggs are Green Tip
European fruit lecanium scale	(Concentrate Spray: Use 6.0 to 8.0	to Delayed Dormant, and for San Jose
European red mite eggs	gal/A in a minimum of 20.0 gal of	scale are Dormant, Green Tip to
Frosted scale	water/A.)	Delayed Dormant.
Fruittree leafroller eggs		
Olive scale San Jose scale		
Terrapin scale	DELAYED DORMANT: Use 2.0 to 3.0	
Terrapiii Scale	gals/100 gal of water at 300 to 600	
	gal/A.	
	(Concentrate Spray: Use 8.0 to 12.0	
	gal/A in a minimum of 20.0 gal of	
	water/A.)	
Cottony peach scale	<b>DORMANT:</b> Use 2.0 to 3.0 gal/100	
	gal of water at 300 to 600 gal/A.	
	(Concentrate Spray: Use 8.0 to 12.0	
	gal/A in a minimum of 20.0 gal of	
	water/A.	
Brown mite	<b>FOLIAR SPRAY:</b> Use 1/2 to 1-1/2 gal/100	Certain varieties of Plums and Prunes
European red mite	gal of water at 300 to 600 gal/A.	may be injured by oil sprays, check for
Pacific mite	(Concentrate Spray: <b>Do not</b> use more than	tolerance prior to treatment.
Two-spotted spider mite	4.0 gal/A in a minimum of 20.0 gal water/A.)	<b>Do not</b> apply to trees lacking moisture.
White peach scale on Peaches:	<b>DORMANT:</b> Use 1-1/2 to 2.0 gal/100	Apply before buds begin to swell in
Only for use in Alabama, Florida,	gal of water at 300 to 600 gal/A.	the spring. Make 2 applications
Georgia, North Carolina,	(Concentrate Spray: Use 6.0 to 8.0	7 to 14 days apart, according to local
and South Carolina.	gal/A in a minimum of 20.0 gal of	recommendations, during the
	water/A.)	dormant period.

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

PEST	APPLICATION RATE & TIMING	COMMENTS
Black scale	PRE-BLOOM WHEN FRUIT BUDS SHOW	Application at this time is preferred.
Brown mite eggs	<b>GREEN TIPS:</b> Use 1-1/2 to 2.0 gal/100	
European fruit lecanium scale	gal of water at 300 to 600 gal/A.	
European red mite eggs	(Concentrate Spray: Use 6.0 to 8.0	
Frosted scale	gal/A in a minimum of 20.0 gal	
Leaf curl plum aphid eggs	water/A.)	
Mealy plum aphid eggs		
Olive scale		
San Jose scale		
Brown mite	FOLIAR SPRAY: Use 1/2 to 1.0 gal/100	Oil sprays may injure certain varieties
European red mite	gal water at 300 to 600 gal/A.	of Plums and Prunes, check for
Pacific mite	(Concentrate Spray: Use 4.0 to 6.0	tolerance prior to treatment.
Two-spotted spider mite	gal/A in a minimum of 20.0 gal	
	water/A.)	

## AVOCADOS:

PESTS	APPLICATION RATE & TIMING	COMMENTS
Avocado brown mite	Use 1/2 to 1.0 gal/100 gal of water	Apply through late fall.
Pracea mite	with thorough coverage in 400 to	Consult with your local University of
Thrip	3000 gal/A.	California Cooperative Extension
	(Concentrate Spray: Use 4.0 to 15.0	Service for proper timing and
	gal/A in a minimum of 50.0 to 100	application parameters.
	gal/A.)	

## BANANAS, PLANTAINS:

PESTS	APPLICATION RATE & TIMING	COMMENTS
Black leaf streak (Mycosphaerella fijiensis) Black sigatoka (Mycosphaerella fijiensis var. difformis) Yellow sigatoka (Mycosphaerella musicola)	Use 1/2 to 1-1/2 gal in 20.0 to 100 gal of water/A. (Mist Blower: Use 1-1/2 gal in 6.0 gal of water/A.)	Begin application when disease first appears and continue every 10 to 15 days during rainy periods or as is needed. Do not apply when daytime temperatures exceed 80 °F as injury may occur.  Phytotoxicity may be affected by the quantity of oil used, vigor of trees and temperature at the time of application. Bag fruits, or use a directed spray on unbagged fruits. Bagged fruit improves crop safety whereas unbagged fruit may show phytotoxicity.  This application is also effective in loosening Sooty mold fungus and in preventing its formation by the control of Aphids, Mealybugs, Scales and Whitefly.

## ${\bf BLUEBERRIES^*,\,BUSHBERRIES^*,\,CANEBERRIES:}$

PESTS	APPLICATION RATE & TIMING (gallons of oil per 100 gallons of water)	COMMENTS
Mites Powdery mildew Rust	0.75 to 1.5	Using ground equipment, spray for optimum coverage of leaf surfaces. For <b>fungal diseases</b> use at least 200 psi spray pressure.

CITRUS: (California Only) - Grapefruit, Lemons, Limes, Oranges (Navel and Valencia), Tangelos and Tangerines and other Citrus hybrids.

APPLICATION RATE & TIMING	COMMENTS
Central California: Apply 1/2 to 1-1/2 gal of oil/100 gal of water as thorough coverage spray (TC). Alternately, use a low volume spray (LV) to apply 1.0 to 10.0	Apply July through September.
gal of oil/A.	
Apply up to 10.0 gal of oil/A on bearing trees up to 10 ft in ht. Add 1.0 gal of oil/A for each ft of tree ht over 10 ft. Apply as a low volume spray (LV) 1.0 to 10.0 gal of oil/A.	
Apply as a low volume spray (LV) 1.0 to 10.0 gal of oil/A.	For Lemons and Limes, make applications in all months except December through February; for Grapefruit make applications July through October; for Oranges make applications on Navels July through September and on Valencias, Tangelos and Tangerines and other Citrus hybrids July through October.
<b>Southern California</b> : Apply 1/2 to 1-1/2 gal of oil/100 gal water as a thorough coverage spray (TC). Alternately, use a low volume spray (LV) to apply 1.0 to 10.0 gal of oil/A.	For Coastal Lemons and Limes, apply May and June and/or September through December. For Interior Lemons and Limes, apply in April and May and/or September through November.
Apply up to 10.0 gal of oil/A on bearing trees up to 10 ft in ht. Add 1.0 gal of oil/A for each ft of tree ht over 10 ft. Apply as a low volume spray (LV) 1.0 to 10.0 gal of oil/A.	
Apply as a low volume spray (LV) 1.0 to 10.0 gal of oil/A.	For Lemons and Limes, make applications in all months except December through February; for Grapefruit make applications July through October; for Oranges make applications on Navels July through September and on Valencias, Tangelos and Tangerines and other Citrus hybrids July through October.
Oxnard Plains Area: Apply 1/2 to 1-1/2 gal of oil/100 gal of water as a thorough coverage spray (TC). Alternately, use a low volume spray (LV) to apply 1.0 to 10.0 gal of oil/A. Apply up to 10.0 gal of oil/A on bearing trees	Make applications as needed throughout the year.
up to 10 ft in ht. Add 1.0 gal of oil/A for each ft of tree ht over 10 ft. Apply as a low volume spray (LV) 1.0 to 10.0 gal of oil/A.	
	Central California: Apply 1/2 to 1-1/2 gal of oil/100 gal of water as thorough coverage spray (TC). Alternately, use a low volume spray (LV) to apply 1.0 to 10.0 gal of oil/A.  Apply up to 10.0 gal of oil/A on bearing trees up to 10 ft in ht. Add 1.0 gal of oil/A for each ft of tree ht over 10 ft. Apply as a low volume spray (LV) 1.0 to 10.0 gal of oil/A.  Apply as a low volume spray (LV) 1.0 to 10.0 gal of oil/A.  Apply as a low volume spray (LV) 1.0 to 10.0 gal of oil/A.  Apply as a low volume spray (LV) to apply 1.0 to 10.0 gal of oil/A.  Apply up to 10.0 gal of oil/A on bearing trees up to 10 ft in ht. Add 1.0 gal of oil/A for each ft of tree ht over 10 ft. Apply as a low volume spray (LV) 1.0 to 10.0 gal of oil/A.  Apply as a low volume spray (LV) 1.0 to 10.0 gal of oil/A.  Apply as a low volume spray (LV) 1.0 to 10.0 gal of oil/A.  Oxnard Plains Area: Apply 1/2 to 1-1/2 gal of oil/100 gal of oil/A.  Oxnard Plains Area: Apply 1/2 to 1-1/2 gal of oil/100 gal of oil/A.  Oxnard Plains Area: Apply 1/2 to 1-1/2 gal of oil/100 gal of oil/A.  Oxnard Plains Area: Apply 1/2 to 1-1/2 gal of oil/100 gal of oil/A.  Oxnard Plains Area: Apply 1/2 to 1-1/2 gal of oil/100 gal of oil/A.

Thorough coverage spray (TC): Applications achieving a uniform film wetting of all portions of the tree at 250 to 2000 gallons of spray solution per acre. The total volume needed is dependent of the size of the trees. **Do not** exceed a maximum of 212 pounds of active ingredient (in a maximum volume of 2000 gallons of spray mix per acre) when treating Citrus in California (based on thorough

coverage spray, with 1-1/2 gallons of product mixed per 100 gallons of water).

Low-volume spray (LV): Applications with droplet depositions achieved on all interior and exterior parts of the tree using 10.0 to 100 gallons of spray solution per acre.

**Do not** apply prior to or during a period of excessively high temperatures.

Do not apply oil spray when trees show stress.

Consult with your local University of California Cooperative Extension Specialist for proper timing and spray program.

#### CITRUS: (Florida and Texas) -Grapefruit, Lemons, Limes, Oranges, Tangelos and Tangerines and other citrus hybrids.

PEST	APPLICATION RATE & TIMING	COMMENTS
Citrus rust mite	5.0 to 10.0 gal of oil/A.	Does not control Citrus snow scale.
	Apply as a dilute spray.	
Spider mites	5.0 to 10.0 gal of oil/A.	
·	Apply as a dilute spray.	
Scale Insects	5.0 gal of oil/A + 6.0 pt Ethion 4EC.	Summer spray only.
-Black soft	Apply as a dilute spray.	Observe all applicable precautions on
-Brown soft		Ethion label.
-Chaff		<b>Do not</b> apply to Navel oranges.
-Glover		
-Purple		
-Red		
-Yellow		
Scale Insects	5.0 to 10.0 gal of oil/A.	
-Black soft	Apply as a dilute spray.	
-Brown soft		
-Chaff		
-Glover		
-Purple		
-Red		
-Yellow		
Whitefly	5.0 gal of oil/A.	
	Apply as a dilute spray.	T. I. I. W. 60 I
Greasy spot	5.0 gal of oil/A.	Tank mix with sufficient copper
(Grapefruit)	Apply as a dilute spray.	fungicide to provide 4.0 lb/A of
	5.0.1.40.0. 1.6.11/A	metallic copper.
Greasy spot	5.0 to 10.0 gal of oil/A.	If disease pressure is severe, tank mix
(all other varieties)	Apply as a dilute spray.	4.0 lb (metallic) copper/A. <b>Do not</b>
Languian anakamala	F 0 to 10 0 and of oil/A	exceed 5.0 gal oil if copper used.
Loosening sooty mold	5.0 to 10.0 gal of oil/A.	Use higher rate when disease pressure
	Apply as a dilute spray.	is heavy.

Dilute spray: Apply the spray oil application rate in up to 1500 gallons of water per acre, or 10.0 to 11.6 gallons per tree, to over 15.0 gallons per tree for large trees. **Do not** exceed a maximum of 159 pounds of active ingredient (in a maximum volume of 1500 gallons of spray mix per acre) when treating Citrus in Florida and Texas (based on dilute spray, with 1-1/2 gallons of product mixed per 100 gallons of water).

Improved efficacy can be obtained when the oil is added to a partially filled spray tank under proper agitation and all foliage is thoroughly covered.

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

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

## COFFEE: \*

PEST	APPLICATION RATE & TIMING	COMMENTS
Green scale	Use 3.0 to 6.0 gal in 100 gal of water/A. Use only water as a diluent.	Apply when insects appear and treat as necessary at 30 to 60 day intervals. <b>Do not</b> exceed 18.0 gal of oil/A in a growing season. <b>Do not</b> apply within 30 days of harvest when berries are handpicked. Oil residues make picking difficult.

**Do not** apply this product through any type of irrigation system. Phytotoxicity may be affected by the quantity of oil used, vigor of trees and temperature at the time of application.

## FIGS:

PESTS	APPLICATION RATE & TIMING (gallons of water)	COMMENTS
Fig scale	1.0 to 3.0	Dormant or Delayed Dormant
Mealybug	1.0 to 2.0	Foliar Spray
Mites		
Scale		

## **GRAPES:**

PEST	APPLICATION RATE & TIMING	COMMENTS
Leafhopper* Mealybug	<b>DORMANT:</b> Use 1.0 to 3.0 gal plus the appropriate label rate of	Do not apply over 300 gal of water/A.
Mites Powdery mildew Whiteflies*	insecticide registered for use on Grapes in 200 to 300 gal of water/A.	Using ground equipment, spray for optimum coverage of leaf surfaces. Repeat sprays every 10 to 14 days.
		For Powdery mildew - Make first application pre-bloom and continue every 10 days to 3 weeks depending on level of disease pressure.  Use higher rate and/or shorter spray interval when disease conditions are severe.  Oil will remove the bloom on Grapes.  Table grapes should not be sprayed within 60 days of harvest.  On Grapes, do not tank mix oil and copper more than once/season.  Do not use copper and oil together with fruit present.

## **OLIVES:**

PEST	APPLICATION RATE & TIMING	COMMENTS
Black scale	POSTBLOOM THROUGH AUGUST AND	
Oleander scale	POST HARVEST: Use 1.0 to 1-1/2	
Olive (Parlatoria) scale	gal/100 gal of water at 400 to 1500	
,	gal/A.	
Mites		Prebloom to Postbloom Buckshot

## **PECANS:**

PESTS	APPLICATION RATE & TIMING	COMMENTS
Aphids (eggs) Mites (eggs) Scales	Use 2.0 to 3.0 gal in 100 gal of water using a minimum of 200 gal of water/A. Use the lower rate of oil when trees are in a weakened condition. (Concentrate Spray: Use 6.0 to 8.0 gal/A	Apply from late February until buds first break.
	in a minimum of 20.0 to 125 gal of water.)	

## STRAWBERRIES:

PESTS	APPLICATION RATE & TIMING (gallons of water)	COMMENTS
Leafminers*	0.75	Spray at no less than 400 psi using
Mites		ceramic spray nozzles (ALBUZ® ATR,
Powdery mildew		lilac color or their equivalent).

## TROPICAL FRUIT: Kiwi, Mango, Papaya and Pineapple.\*

PESTS	APPLICATION RATE & TIMING	COMMENTS
KIWI Greedy scale Latania scale Oleander scale	Use 4.0 to 6.0 gal of oil in a minimum of 100 gal of water/A. Use higher rate when scale populations are high.	<b>Do not</b> apply after budbreak. <b>Do not</b> use on weak or stressed vines, or where soil moisture is inadequate.
San Jose scale	populations are mgm.	
MANGO	Use 1.0 to 1.5 gal of oil in 100 gal	Apply every 2 to 3 weeks as necessary
Mites Powdery mildew	of water/A.	depending on level of pest pressure.
PAPAYA Mites Papaya ringspot virus Powdery mildew	Use 0.75 to 1.5 gal in 100 gal of water/A.	For Powdery mildew/mites: Spray every 10 to 14 days depending on the level of pest pressure. For Virus: Initiate spray when seeds are germinated. Spray weekly using 400 psi spray pressure and ceramic hollow cone nozzles.
PINEAPPLE	Spray - Use 1.0 to 2.0 gal of oil in	Allow fruit to dry for 1 hour before being
Bud moth	100 gal of water/A.	stored.
Chinese rose beetle	<b>Dip</b> - Use 1.0 to 2.0 gal of oil in 100	
<u>Mealybugs</u>	gal of water, dip for 30 seconds.	

## WALNUTS:

PEST	APPLICATION RATE & TIMING	COMMENTS
Black scale	DELAYED DORMANT: Use 4.0	Use only on trees that have not
Calico scale	to 6.0 gal/A in 200 to 500 gal	suffered from lack of moisture at any
European fruit lecanium scale	of water/A.	time during the growing season. <b>Do</b>
Frosted scale		<b>not</b> apply to orchards where soil
Olive scale		moisture is low.
San Jose scale		Trees must be fully dormant.
		<b>Do not</b> apply after husk split.
European red mite eggs		2 2 2 P. P. 2 2 2 P.
Walnut aphid eggs		
Soft scales	SUMMER FOLIAR (when leaves fully	
Spider mites	expanded): Use 4.0 to 6.0 gal/A in	
	200 to 500 gal water/A.	

#### **VEGETABLE CROPS**

ASPARAGUS, BEANS, BEETS, CABBAGE, CAULIFLOWER and other Cole crops, CELERY, CUCURBITS, EGGPLANT, LETTUCE, MELON, PEPPER, POTATO, PUMPKIN, RADISH, SQUASH, SWEET POTATO, TOMATO, HERBS AND SPICES (Curly leaf basil, Lemon balm, Mexican oregano, Mint), ORIENTAL VEGETABLES (Acerola, Atemoy, Balsam pear (Bitter melon), Carambola, Chinese broccoli (Gai Ion), Chinese cabbage (Gai choy), Chinese spinach, Chinese waxgourd, Cilantro, Citron melon, Dasheen, Ginger, Ginseng, Japanese artichoke, Japanese radish (Daikon), Rambutan):

PESTS	APPLICATION RATE & TIMING (gallons of water)	COMMENTS
Aphids Beetle larvae Leafhopper Leafminers Mites Thrips Whitefly	0.75 to 1.0	For virus control on Cucurbits use 0.75 gal/100 g. Spray once or twice weekly depending on the rapid growth of the crop and / or vector pressure.  When using to control insect transmitted diseases, use higher pressure 400 psi and ceramic hollow cone nozzles.

#### **ORNAMENTALS**

#### **FOLIAGE ORNAMENTALS & BEDDING PLANTS:**

PESTS	APPLICATION RATE & TIMING (ounces of oil per gallon of water)	COMMENTS
Adelgids	1.0 to 2.5 oz/gal	Summer (Foliar or Cover): <b>Do not</b> spray
Aphids		plants during flowering.

SHADE TREES\*\* AND SHRUBS INCLUDING CONIFERS, DECIDUOUS BROADLEAF EVERGREENS & WOODY ORNAMENTALS, ORNAMENTAL TREES\*\*, SHRUBS ALONG CITY STREETS, OTHER RIGHTS-OF-WAY INCLUDING CONIFERS, DECIDUOUS AND BROADLEAF EVERGREENS:

PESTS	APPLICATION RATE & TIMING (ounces of oil per gallon of water)	COMMENTS
Adelgids	Winter Dormant Period:	<b>CAUTION:</b> Spray no more than 4 times
Aphids Eriophyid mites	2.5 to 4.0 oz/gal	during the growing season; use 2 week minimum application Interval. <b>Do</b>
Gall mites		<b>not</b> spray when there is obvious
Honey locust plant bug Lace bug Leaf beetle larvae Leafminer Leafrollers Mealybugs Psyllids (immature) Red mites Sawfly (larvae) Scales (immature) Spider mites Webworms Whiteflies	Summer (Foliar or Cover): 1.0 to 2.5 oz/gal	moisture deficit in leaves, or the plant is under stress. For fall dormant applications, reduce rate to 2.0 gal oil/100 gal water and limit use only to: American red oak, Japanese black pine, Dogwood, Weeping cherry, Cornelian cherry, Crabapple, Norway maple, Purple plum.  NOTE: May cause discoloration of Blue spruce. Do not use on Conifers or Ferns not tolerant to oil sprays. Use enough spray solution to completely penetrate the leaf canopy and cover both top and bottom of all of the leaves and stems until wet but without significant runoff.  Do not spray during flowering.

#### FLOWERING AND FOLIAGE PLANTS INCLUDING ROSES AND OTHER FLOWERING SHRUBS:

PESTS	APPLICATION RATE & TIMING (ounces of oil per gallon of water)	COMMENTS
Same as above	Winter Dormant Period: 2.5 to 4.0 oz/gal	Do not spray during flowering.

#### CHRISTMAS TREES \*\*:

PESTS	APPLICATION RATE & TIMING	COMMENTS	
	(ounces of oil per gallon of water)		
Scale (soft & hard) (immature)	2.0 to 3.0	Winter	
Spider mites	0.75 to 2.0	Summer	

Use a lower concentration for more sensitive plants.

#### **GREENHOUSE AND CONTAINER**

**Frequency of Application:** For the greenhouse pests listed, use once a week initially, then as the pest is controlled, decrease the frequency to every 2 to 3 weeks as needed.

Application safety during bloom period should be determined for each individual species of plant to be treated by conducting a small test.

## AGERATUM, CROWN OF THORNS, DIEFFENBACHIA, FERNS, FICUS, LISIANTHUS, ORCHID, PALMS, PETUNIA, POINSETTIA, SCHEFFLERA, SUNFLOWER:

PESTS	APPLICATION RATE & TIMING (gallons of water)	COMMENTS
Aphids Fungus gnats Leafminers Mealybugs Scales (soft & hard) Spider mites Thrips Whitefly	0.5 to 1.0	Due to varietal differences in response to a treatment of this product at the specified rates, conduct a small test on 1 or 2 plants of the specific variety to be treated.

## **LEAF POLISH FOR HARDY PLANTS:**

PESTS	APPLICATION RATE & TIMING	COMMENTS
	(ounces of oil per gallon of water)	
	1.0	

AGLAONEMA, ASTER, AZALEAS, BEGONIAS, BROWALLIA, CAMELLIAS, CARNATION, CELOSIA, CHRYSANTHEMUM, COLEUS, COSMOS, DUSTY MILLER, EASTER LILIES, GARDENIAS, GERBERA, HELLICHRYSUM, HIBISCUS FOLIAGE, HYDRANGEA, JADE PLANT, MARIGOLD, NEW GUINEA IMPATIENS, NICOTONIA, PHILODENDRON, PORTULACA, REIGER BEGONIAS, SNAPDRAGON, ZINNIAS:

PESTS	APPLICATION RATE & TIMING (gallons of water)	COMMENTS
Aphids	1.0 to 2.0	Due to varietal differences in response
Fungus gnats		to a treatment of this product at the
Leafminers		specified rates, conduct a small test on
Mealybugs		1 or 2 plants of the specific variety to
Scales (soft & hard)		be treated.
Spider mites		
Thrips		
Whitefly		

<sup>\*\*</sup> This product 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.

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

#### FIELD CROPS

## CORN (Sweet & Field), SUGAR BEETS:

PESTS	APPLICATION RATE & TIMING (gallons of water)	COMMENTS
Aphids Armyworm Corn earworm Leafminers	Corn: 1.0 to 2.0 Sugar Beets: 2.0	
Mites		
Rootworm Whitefly		
HOPS*:		
PESTS	APPLICATION RATE & TIMING (gallons of oil per 100 gallons of water)	COMMENTS
Mites Powdery mildew	1.0 to 2.0	For Powdery mildew: Initiate sprays at early leaf stage. Continue sprays every 10 to 14 days. Mite control will be effective under the same spray interval as Powdery mildew sprays. Discontinue sprays at burr development.
ТОВАССО:		
PESTS	APPLICATION RATE & TIMING (gallons of oil per 100 gallons of water)	COMMENTS
Aphids Beetle larvae Leafhopper Leafminers Mites Thrips Whitefly	0.75 to 1.0	

<sup>\*</sup>Asterisk denotes crop, pest Not approved in California.

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

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

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

**CONTAINER DISPOSAL: Nonrefillable container.** Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org. If not recycled, then puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

For packages up to 5 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For packages greater than 5 gallons and less than 56 gallons: 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. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**For packages greater than 56 gallons:** 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.

**For refillable containers:** 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. Offer for recycling or reconditioning, if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC – 1-800-424-9300.

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