

4-80

6/21/2010

1/21



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:
 4-80

Date of Issuance:
 JUN 21 2010

NOTICE OF PESTICIDE:
 _ Registration
x Reregistration
 (under FIFRA, as amended)

Term of Issuance: Unconditional

Name of Pesticide Product:
 BONIDE® HORTICULTURAL
 AND DORMANT SPRAY OIL

Name and Address of Registrant (include ZIP Code):
 Ms. Rebecca Horton, Consultant/Agent for Bonide Products, Inc.
 Registrations by Design, Inc.
 P.O. Box 1019
 Salem, VA 24153

5876920
 676/1275

~~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 "Aug. 25, 2008" is accepted and replaces all CSFs previously accepted for this product.

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments in this letter.

See page 2 for required changes to labeling.

You must submit one (1) copy of the final printed labeling 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 William Jacobs at 703-305-6406 or jacobs.bill@epa.gov.

Signature of Approving Official:
 Venus Eagle, Product Manager 01
 Insecticide-Rodenticide Branch
 Registration Division (7505P)

Venus Eagle

Date:
 JUN 21 2010

Labeling Changes for EPA Reg. No. 4-80

The changes identified below must be made to the proposed labeling dated “June 17, 2010 – re-regis revised”.

VERSION A (Commercial/Agricultural) – Container (pages 1 and 2)

1. The qualification “Do not apply when temperature is greater than 90°F or less than 40°F” for the “Optional Marketing” claim “Use year-round” also must be used (via footnote) for any alternate brand name for this product that implies year-round use (e.g., “All Seasons® Horticultural and Dormant Spray Oil Ready to Spray”, “Bonide All Seasons® Horticultural & Dormant Spray Oil”, “Bonide All Seasons® Commercial Horticultural & Dormant Spray Oil Concentrate”, and “All Seasons® Commercial Horticultural & Dormant Spray Oil Concentrate”).

VERSION A (Commercial/Agricultural) – Booklet (pages 3-10)

1. The qualification “Do not apply when temperature is greater than 90°F or less than 40°F” for the “Optional Marketing” claim “Use year-round” (page 3) also must be used (via footnote) for any alternate brand name for this product that implies year-round use (e.g., “All Seasons® Horticultural and Dormant Spray Oil Ready to Spray”, “Bonide All Seasons® Horticultural & Dormant Spray Oil”, “Bonide All Seasons® Commercial Horticultural & Dormant Spray Oil Concentrate”, and “All Seasons® Commercial Horticultural & Dormant Spray Oil Concentrate”).
2. On page 7, add “**CITRUS AND OTHER FRUIT TREES**” to the subheading “**SHADE TREES, ORNAMENTALS, ROSES:**”. The “**GROWING SEASON:**” paragraph that comes under that subheading includes directions for use on citrus and other types of fruit trees.

VERSION B (Residential) – Container (pages 11 and 12)

1. The qualification “Do not apply when temperature is greater than 90°F or less than 40°F” for the “Optional Marketing” claim “Use year-round” also must be used (via footnote) for any alternate brand name for this product that implies year-round use (e.g., “All Seasons® Horticultural and Dormant Spray Oil Ready to Spray” and “Bonide All Seasons® Horticultural & Dormant Spray Oil”).

VERSION B (Residential) – Booklet (pages 13-18)

1. The qualification “Do not apply when temperature is greater than 90°F or less than 40°F” for the “Optional Marketing” claim “Use year-round” also must be used (via footnote) for any alternate brand name for this product that implies year-round use (e.g., “All Seasons® Horticultural and Dormant Spray Oil Ready to Spray” and “Bonide All Seasons® Horticultural & Dormant Spray Oil”).

2. On page 15, left-justify "**HOW TO USE READY-TO-SPRAY CONTAINER**" to make it clear that the text that follows it is a subsection of the "**DIRECTIONS FOR USE**".
3. On page 16, add "**CITRUS AND OTHER FRUIT TREES**" to the subheading "**SHADE TREES, ORNAMENTALS, ROSES:**".

4/21

VERSION A
(Commercial/Agricultural)



ACCEPTED
With COMMENTS
In EPA Letter Dated:

[FRONT PANEL]



JUN 21 2010
Under the Federal Insecticide, Fungicide
and Rodenticide Act, As amended, for the
pesticide Registered under EPA Reg. No:
4-80

BONIDE® HORTICULTURAL AND DORMANT SPRAY OIL

[Additional Brand Names: All Seasons® Horticultural and Dormant Spray Oil Ready to Spray; Bonide All Seasons® Horticultural & Dormant Spray Oil; Bonide All Seasons® Commercial Horticultural & Dormant Spray Oil Concentrate; All Seasons® Commercial Horticultural & Dormant Spray Oil Concentrate]

Optional Marketing Statements:

Kills insects by smothering.

For use on fruit trees, shade trees, evergreens, ornamentals, flowers.

Use year-round¹.

For use on Fruit Trees, Shade Trees, Roses, Ornamental Shrubs and Vegetables listed on this label.

Dormant and Growing Season Insect Spray

CONTROLS Scale Insects, Mealybugs, Apple Aphids, European Red Spider Mites, Leafminers, Leaf rollers [redbanded, obliquebanded, fruittree], Light Brown Apple Moth and other insects listed on this label... USE on pears, cherries, peaches, asparagus, corn, peppers, roses, and other crops as listed on this label.

ACTIVE INGREDIENT:

Mineral Oil* (CAS #8012-95-1)..... 98%

OTHER INGREDIENTS:..... 2%

TOTAL..... 100%

(Superior type U.R. Min 92%)

*Contains petroleum distillates.

KEEP OUT OF REACH OF CHILDREN CAUTION

See side/back/other panel(s) for additional precautionary statements and First Aid.

NET CONTENTS: _____

¹Do not apply when temperature is greater than 90°F or less than 40°F

[BACK/SIDE/OTHER PANEL(S)]

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

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 washwater or rinsate.

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

STORAGE AND DISPOSAL

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

Pesticide Storage: Store unused product in original container only. Store in a cool, dry area out of the reach of children and animals.

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

[For containers \leq 5 gallons]:

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) 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 $\frac{1}{4}$ 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 or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

[For containers $>$ 5 gallons]:

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ 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 or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

For information on pesticide products (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

SEE ATTACHED BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND COMPLETE DIRECTIONS FOR USE.

Bonide Products, Inc., 6301 Sutliff Road, Oriskany, NY 13424

[batch code inserted at production]

[ATTACHED BOOKLET]



BONIDE® HORTICULTURAL AND DORMANT SPRAY OIL

[Additional Brand Names: All Seasons® Horticultural and Dormant Spray Oil Ready to Spray; Bonide All Seasons® Horticultural & Dormant Spray Oil; Bonide All Seasons® Commercial Horticultural & Dormant Spray Oil Concentrate; All Seasons® Commercial Horticultural & Dormant Spray Oil Concentrate]

Optional Marketing Statements:

Kills insects by smothering.

For use on fruit trees, shade trees, evergreens, ornamentals, flowers.

Use year-round¹.

For use on Fruit Trees, Shade Trees, Roses, Ornamental Shrubs and Vegetables listed on this label.

Dormant and Growing Season Insect Spray

CONTROLS Scale Insects, Mealybugs, Apple Aphids, European Red Spider Mites, Leafminers, Leaf rollers [redbanded, obliquebanded, fruittree], Light Brown Apple Moth and other insects listed on this label... USE on pears, cherries, peaches, asparagus, corn, peppers, roses, and other crops as listed on this label.

ACTIVE INGREDIENT:

Mineral Oil* (CAS #8012-95-1)..... 98%

OTHER INGREDIENTS:..... 2%

TOTAL..... 100%

(Superior type U.R. Min 92%)

*Contains petroleum distillates.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

¹Do not apply when temperature is greater than 90°F or less than 40°F

FIRST AID

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Pesticide Information Center at 1-800-858-7378 for emergency medical treatment information.

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

Note to Physician: This product contains petroleum distillates and may pose an aspiration pneumonia problem.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

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 an EPA chemical-resistance category selection chart.

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

- long-sleeve shirt and long pants,
- shoes plus socks,
- chemical-resistant gloves.

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.

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. Users 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.

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 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. Do not apply this product through any type of irrigation system (i.e., via chemigation).

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, decontaminating, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about person 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 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.

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 green houses. 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.

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

Swath Adjustment: 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.

NOTE: DO NOT APPLY HORTICULTURAL SPRAY OIL WITH SULFUR SPRAYS OR WHERE SULFUR IS ON THE FOLIAGE. TO DO SO MAY CAUSE FOLIAGE INJURY, LEAF DROP. DO NOT APPLY HORTICULTURAL SPRAY OIL AT ABNORMAL TEMPERATURES (ABOVE 90°F) OR WHEN PLANTS ARE DRY (SUFFERING FOR WANT OF MOISTURE) AS IT MAY CAUSE LEAF DROP DUE TO "SHOCK."

HORTICULTURAL SPRAY OIL is a self-emulsifying spray oil, composed of paraffinic oil with emulsifier and spreader sticker, which envelop, wet and smother over wintering eggs of European red spider mites, Adelgids, scale insects, apple aphids (except rosy aphids), bud moth, leaf roller [redbanded, obliquebanded, fruittree], light brown apple moth, red bug, codling moth larvae, psylla (adults), blister mites, galls, whitefly larvae and mealybugs on fruit trees, shade trees, vegetables, ornamentals, shrubs and roses.

HORTICULTURAL SPRAY OIL may be used at the DORMANT STAGE (before buds show green tissue), GREEN TIP STAGE (when leaves of blossom buds are bursting and show about 1/8 to 1/4 inch of green color), DELAYED DORMANT STAGE (when the leaves of the blossom buds are out from 1/4 to 1/2 inch), and during the GROWING SEASON.

DILUTION TABLE

Amt. Dormant Spray Oil		Amt. Water	Actual Oil	Amt. Dormant Spray Oil
1 Qt.	+	25 Gals.	= 1%	Small Quantities 2½ Tbs. (1¼ fl. oz.) with 1 gal. of water
2 Qts.	+	25 Gals.	= 2%	5 Tbs. (2½ fl. oz.) with 1 gal. of water
3 Qts.	+	25 Gals.	= 3%	7½ Tbs. (3¾ fl. oz.) with 1 gal. of water
1 Gal.	+	25 Gals.	= 4%	5 fl. oz. with

1½ Gals.	+	25 Gals.	=	6%	1 gal. of water 7 fl. oz. with
1¾ Gals.	+	25 Gals.	=	7%	1 gal. of water 8 fl. oz. with 1 gal. of water

2 Tablespoons = 1 fluid ounce

Consult your experiment station for proper timing and choice of fungicide to use with HORTICULTURAL SPRAY OIL.

SHAKE WELL. Then add HORTICULTURAL SPRAY OIL to desired amount of water and mix thoroughly. Use a good pressure spray and apply enough liquid per tree to wet entire surface of branches, main limbs and trunk. Give special attention to underside of limbs. Make application when the temperature is above 40°F.

APPLES: GREEN TIP THROUGH THE DELAYED DORMANT STAGES – For scale insects, red bugs, European red mite, bud moth, leaf roller [redbanded, obliquebanded, fruittree], light brown apple moth, apple aphids (except rosy aphids). Use 2% actual oil solution for mites, San Jose scale – Use 3% actual oil solution for scurfy scale, leaf roller [redbanded, obliquebanded, fruittree], light brown apple moth, bud moth, red bug, codling moth larvae. DORMANT STAGE of bud development for all above mentioned insects, use 4% actual oil.

PEARS: DORMANT STAGE – For scale insects, blister mite, leaf roller [redbanded, obliquebanded, fruittree], light brown apple moth, psylla (adults) – Use 3% actual oil solution, apply spray on the 3rd or 4th sunny warm day in early spring before buds break and when psylla flies are swarming on the spurs.

PLUMS, PRUNES: DELAYED DORMANT – For European red mites, scale insects – Use 2% actual oil solution for red mites and San Jose scale. – Use 3% to 4% actual oil solution for scurfy scale.

PEACHES: DELAYED DORMANT – For European red mites, scale insects. – Use 3% to 4% actual oil solution.

CHERRIES (Sour): DORMANT STAGE – For European red mites, scale insects. – Use 3% to 4% actual oil solution.

GRAPES: DORMANT STAGE – For grape plume moth, scale insects. – Use 3% actual oil solution; apply before buds begin to swell.

SHADE TREES, ORNAMENTALS, ROSES: GREEN TIP THROUGH THE DELAYED DORMANT STAGES – For scale insects, certain aphids, gall, whitefly larvae, light brown apple moth, mealybugs, Adelgids. – Use 3% actual oil solution. – For scurfy scale, use 4% actual oil solution. – For terrapin scale, use 6% to 7% actual oil solution.

GROWING SEASON – To control Scale Insects, Red Spider Mites, light brown apple moth, Mealybugs and Whitefly Larvae on Citrus* (Oranges, Lemons, Grapefruit, Tangerines, Limes), Fruit Trees (Apples, Plums, Pears, Apricots, Peaches, Pecans, Cherries), Shade Trees, Evergreens, Camellias, Azaleas, Hardy Shrubs: 5 Tablespoonfuls (2½ fl. oz.) per gal. water (2% actual oil solution). This application is also effective in the removal of sooty mold fungus through the control of Whitefly Larvae.

*Citrus: Maximum of 159 pounds active ingredient per acre (maximum 1500 gallons of spray mix per acre) in Texas and Florida, and 212 pounds active ingredient per acre (maximum 2000 gallons of spray mix per acre) in California.

GREENHOUSE

Plant	Pest	Application Rate per 1 Gallon Water	Specific Comments
Azaleas, Begonias, Camellias, Chrysanthemums, Easter Lilies, Ferns, Gardenias, Geranium, Hibiscus Foliage, Jade Plant, New Guinea Impatiens, Palms, Philodendron, Portulaca, Reigor Begonias, Zinnias	Aphids, Fungus Gnat, Leafminers, Mealybugs, Scales (soft & hard), Spider Mites, Whitefly*	2.5 – 5.0 Tbs.	Do not use on Coconut Palms or Maidenhair Ferns. The blooms of Chrysanthemum and Geranium have shown Phytotoxic symptoms at the 5 tablespoon rate. Frequency of Application: <i>For the greenhouse pests listed, use once a week initially, then as the pest is controlled, decrease the frequency to every 2-3 weeks as needed.</i>
Dieffenbachia, Poinsettias		2.5 Tbs.	Do not use on Poinsettia bracts.
Leaf Polish for Hardy Plants		2.5 Tbs.	

*Horticultural and Dormant Spray Oil is most effective on Whitefly during immature stages.

FOR GREENHOUSES

- Apply using a tank-type pressure sprayer or watering can.
- Do not exceed the maximum rates or apply more often than indicated on this label.
- Certain plant species may be sensitive to oil. A small number of plants should be test sprayed prior to general spraying.
- Use caution on open blooms – bleaching and spotting have been observed on the open bloom of certain plants.

FRUITS

Crop (Site)	Pest	Application Rate	Time of Application
Blueberry	Thrips Mites Sawfly (eggs) Scales	5.0 Tbs. (2½ fl. oz.) with 1 gal. of water (2% actual oil solution)	Foliage
		7.5 Tbs. (3¾ fl. oz.) with 1 gal. of water (3% actual oil solution)	Dormant
Strawberry	Aphids Mites	2.5 Tbs. (1¼ fl. oz.) with 1 gal. of water (1% actual oil solution)	Dormant (and Foliage)
Grape	Mealybugs	10-15 Tbs. (5-7½ fl. oz.) with 2-3 gal. of water (2%-3% actual oil solution)	Dormant – A tank mix with an insecticide improves control.

VEGETABLES

Crop (Site)	Pest	Application Rate	Time of Application
Asparagus, Beans, Beets, Corn, Pepper, Radish, Squash, Tomato	Aphids, Mites, Beetle Larvae, Leafminers, Thrips, Leafhopper, Whitefly	2.5 – 5.0 Tbs. (1¼-2½ fl. oz.) with 1 gal. of water (1%-2% actual oil solution)	As needed

IMPORTANT: Do not spray again with oil for at least a month. Do not spray drought injured or winter burned plants. Do not apply oil sprays within 30 days of sulfur applications. Injury may result if oil sprays are used on ferns, palms, hibiscus, certain conifers including blue spruce, white pine, arborvitae and junipers, and certain deciduous trees such as Japanese maple, beech, hickory, walnut and butternut.

To determine actual oil percentage, consult dilution table.

When used in knapsack or small sprayer, shake occasionally to keep solution agitated.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store unused product in original container only. Store in a cool, dry area out of the reach of children and animals.

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

[For containers ≤ 5 gallons]:

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) 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 ¼ 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 or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

[For containers > 5 gallons]:

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ 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 or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

For information on pesticide products (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

13
21

WARRANTY

Seller warrants that this product complies with the specifications expressed in this label. To the extent consistent with applicable law, Seller makes no other warranties, and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for the intended purpose. To the extent consistent with applicable law, Seller's liability or default, breach or failure under this label shall be limited to the amount of the purchase price. To the extent consistent with applicable law, Seller shall have no liability for consequential damages.

Bonide Products, Inc.
6301 Sutliff Road
Oriskany, NY 13424

14
21

VERSION B
(Residential)



[FRONT PANEL]



BONIDE® HORTICULTURAL AND DORMANT SPRAY OIL

[Additional Brand Names: All Seasons® Horticultural and Dormant Spray Oil Ready to Spray; Bonide All Seasons® Horticultural & Dormant Spray Oil]

Optional Marketing Statements:

Kills insects by smothering.

For use on fruit trees, shade trees, evergreens, ornamentals, flowers.

Use year-round¹.

For use on Fruit Trees, Shade Trees, Roses, Ornamental Shrubs and Vegetables listed on this label.

Dormant and Growing Season Insect Spray

CONTROLS Scale Insects, Mealybugs, Apple Aphids, European Red Spider Mites, Leafminers, Leaf rollers [redbanded, obliquebanded, fruittree], Light Brown Apple Moth and other insects listed on this label... USE on pears, cherries, peaches, asparagus, corn, peppers, roses, and other crops as listed on this label.

ACTIVE INGREDIENT:

Mineral Oil* (CAS #8012-95-1)..... 98%

OTHER INGREDIENTS:..... 2%

TOTAL..... 100%

(Superior type U.R. Min 92%)

*Contains petroleum distillates

KEEP OUT OF REACH OF CHILDREN

CAUTION

See side/back/other panel(s) for additional precautionary statements and First Aid.

NET CONTENTS: _____

¹Do not apply when temperature is greater than 90°F or less than 40°F

15
/
21

[BACK/SIDE/OTHER PANEL(S)]

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Wear long-sleeved shirt, long pants, shoes, socks and waterproof gloves when using or handling this product.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems. Apply this product only as specified on the label.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store and transport in an upright position. Keep container tightly closed to prevent evaporation. Do not use, pour, spill or store near heat or open flame. Store in a cool dry area inaccessible to children or pets.

Pesticide Disposal: *If partly filled* – Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

Container Disposal: *If empty* – Nonrefillable container. Do not reuse or refill this container. Place in trash or offer for recycling if available.

SEE ATTACHED BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND COMPLETE DIRECTIONS FOR USE.

For information on pesticide products (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

Bonide Products, Inc.
6301 Sutliff Road
Oriskany, NY 13424

[batch code inserted at production]



[ATTACHED
BOOKLET]



BONIDE[®] HORTICULTURAL AND DORMANT SPRAY OIL

[Additional Brand Names: All Seasons[®] Horticultural and Dormant Spray Oil Ready to Spray;
Bonide All Seasons[®] Horticultural & Dormant Spray Oil]

Optional Marketing Statements:

Kills insects by smothering.

For use on fruit trees, shade trees, evergreens, ornamentals, flowers.

Use year-round¹.

For use on Fruit Trees, Shade Trees, Roses, Ornamental Shrubs and Vegetables listed on this label.

Dormant and Growing Season Insect Spray

CONTROLS Scale Insects, Mealybugs, Apple Aphids, European Red Spider Mites, Leafminers, Leaf rollers [redbanded, obliquebanded, fruittree], Light Brown Apple Moth and other insects listed on this label... USE on pears, cherries, peaches, asparagus, corn, peppers, roses, and other crops as listed on this label.

ACTIVE INGREDIENT:

Mineral Oil* (CAS #8012-95-1)..... 98%

OTHER INGREDIENTS:..... 2%

TOTAL..... 100%

(Superior type U.R. Min 92%)

*Contains petroleum distillates

KEEP OUT OF REACH OF CHILDREN

CAUTION

NET CONTENTS: _____

¹Do not apply when temperature is greater than 90°F or less than 40°F

17
21

FIRST AID

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Pesticide Information Center at 1-800-858-7378 for emergency medical treatment information.

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

Note to Physician: This product contains petroleum distillates and may pose an aspiration pneumonia problem.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Wear long-sleeved shirt, long pants, shoes, socks and waterproof gloves when using or handling this product.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems. Apply this product only as specified on the label.

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 any way that it will contact other persons or pets, either directly or through drift. Keep other persons out of the treated area during application. Do not allow persons or pets to enter the treated area until sprays have dried.

NOTE: DO NOT APPLY HORTICULTURAL SPRAY OIL WITH SULFUR SPRAYS OR WHERE SULFUR IS ON THE FOLIAGE. TO DO SO MAY CAUSE FOLIAGE INJURY, LEAF DROP. DO NOT APPLY HORTICULTURAL SPRAY OIL AT ABNORMAL TEMPERATURES (ABOVE 90°F) OR WHEN PLANTS ARE DRY (SUFFERING FOR WANT OF MOISTURE) AS IT MAY CAUSE LEAF DROP DUE TO "SHOCK."

Mixture ratios vary. Read and use according to application directions. Apply using a good pressure spray hose-end or watering can.

HORTICULTURAL SPRAY OIL is a self-emulsifying spray oil, composed of paraffinic oil with emulsifier and spreader sticker, which envelop, wet and smother over wintering eggs of European red spider mites, Adelgids, scale insects, apple aphids (except rosy aphids), bud moth, leaf roller [redbanded, obliquebanded, fruittree], light brown apple moth, red bug, codling moth

larvae, psylla (adults), blister mites, galls, whitefly larvae and mealybugs on fruit trees, shade trees, vegetables, ornamentals, shrubs and roses.

HORTICULTURAL SPRAY OIL may be used at the **DORMANT STAGE** (before buds show green tissue), **GREEN TIP STAGE** (when leaves of blossom buds are bursting and show about 1/8 to 1/4 inch of green color), **DELAYED DORMANT STAGE** (when the leaves of the blossom buds are out from 1/4 to 1/2 inch), and during the **GROWING SEASON**.

(WHEN PACKAGED IN READY-TO-SPRAY CONTAINER)

HOW TO USE READY-TO-SPRAY CONTAINER

Make sure water control knob on hose sprayer is in the "OFF" position. Hold by handle and shake vigorously, turning bottle as you shake. Attach hose to spray nozzle. Bend safety tab back and break off. Turn control to "WATER" position. Slowly turn on water supply to moderate rate of flow. Point nozzle toward spray area, turn control knob to "ON." Product will automatically mix with the water. Slowly sweep the area to be treated. To stop spraying, turn control valve to the "OFF" position. Turn off water at faucet. To relieve pressure, turn control valve to the "WATER" position pointing sprayer away from self. Remove from hose.

(WHEN PACKAGED IN MIX & APPLY CONTAINER)

DILUTION TABLE

Amt. Dormant Spray Oil in 1 Gal. Water	Amt. Dormant Spray Oil in 2 Gal. Water	Actual Oil Solution
2½ Tbs. (1¼ fl. oz.)	5 Tbs. (2½ fl. oz.)	1%
5 Tbs. (2½ fl. oz.)	5 fl. oz.	2%
7½ Tbs. (3¾ fl. oz.)	7½ fl. oz.	3%
5 fl. oz.	10 fl. oz.	4%
7 fl. oz.	14 fl. oz.	6%
8 fl. oz.	1 pt.	7%

2 Tablespoons = 1 fluid ounce

Consult your experiment station for proper timing and choice of fungicide to use with **HORTICULTURAL SPRAY OIL**.

SHAKE WELL. Then add **HORTICULTURAL SPRAY OIL** to desired amount of water and mix thoroughly. Use a good pressure spray and apply enough liquid per tree to wet entire surface of branches, main limbs and trunk. Give special attention to underside of limbs. Make application when the temperature is above 40°F.

APPLES: GREEN TIP THROUGH THE DELAYED DORMANT STAGES – For scale insects, red bugs, European red mite, bud moth, leaf roller [redbanded, obliquebanded, fruittree], light brown apple moth, apple aphids (except rosy aphids). Use 2% actual oil solution for mites, San Jose scale – Use 3% actual oil solution for scurfy scale, leaf roller [redbanded, obliquebanded, fruittree], light brown apple moth, bud moth, red bug, codling moth larvae. **DORMANT STAGE** of bud development for all above mentioned insects, use 4% actual oil.

PEARS: DORMANT STAGE – For scale insects, blister mite, leaf roller [redbanded, obliquebanded, fruittree], light brown apple moth, psylla (adults) – Use 3% actual oil solution, apply spray on the 3rd or 4th sunny warm day in early spring before buds break and when psylla flies are swarming on the spurs.

PLUMS, PRUNES: DELAYED DORMANT – For European red mites, scale insects – Use 2% actual oil solution for red mites and San Jose scale. – Use 3% to 4% actual oil solution for scurfy scale.

PEACHES: DELAYED DORMANT – For European red mites, scale insects. – Use 3% to 4% actual oil solution.

CHERRIES (Sour): DORMANT STAGE – For European red mites, scale insects. – Use 3% to 4% actual oil solution.

GRAPES: DORMANT STAGE – For grape plume moth, scale insects. – Use 3% actual oil solution, apply before buds begin to swell.

SHADE TREES, ORNAMENTALS, ROSES: GREEN TIP THROUGH THE DELAYED DORMANT STAGES – For scale insects, aphids (wooly apple, green apple, rosy apple, mealy plum, black cherry), gall, whitefly larvae, light brown apple moth, mealybugs, Adelgids. – Use 3% actual oil solution. – For scurfy scale, use 4% actual oil solution. – For terrapin scale, use 6% to 7% actual oil solution.

GROWING SEASON – To control Scale Insects, Red Spider Mites, light brown apple moth, Mealybugs and Whitefly Larvae on Citrus* (Oranges, Lemons, Grapefruit, Tangerines, Limes), Fruit Trees (Apples, Plums, Pears, Apricots, Peaches, Pecans, Cherries), Shade Trees, Evergreens, Camellias, Azaleas, Hardy Shrubs: 5 Tablespoonfuls (2½ fl. oz.) per gal. water (2% actual oil solution). This application is also effective in the removal of sooty mold fungus through the control of Whitefly Larvae.

*Citrus: Maximum of 3.6 pounds active ingredient per 1,000 sq. ft. in Texas and Florida, and 4.8 pounds active ingredient per 1,000 sq. ft. in California.

HOUSEPLANTS

Plant	Pest	Application Rate per 1 Gallon Water	Comments*
Chrysanthemum, Dieffenbachia, Dracaena, Ferns, Gardenias, Jade Plant, Palms, Philodendron, Schefflera	Aphids, Leafminers, Mealybugs, Scales, Spider Mites, Whitefly*	2.5 – 5.0 Tbs. (1¼-2½ fl. oz.)	Do not apply to plants in direct sunlight behind glass. Do not use on Coconut Palms or Maidenhair Ferns. Chrysanthemum blooms have shown phytotoxic symptoms at the higher rate.

*Horticultural and Dormant Spray Oil is most effective on Whitefly during immature stages.

Protect floor, floor coverings and furnishings from overspray.

20
/
2

NOTICE: Do not exceed 3 consecutive applications without allowing a two week application interval.

HOME GREENHOUSE

Plant	Pest	Application Rate per 1 Gallon Water	Specific Comments
Azaleas, Begonias, Camellias, Chrysanthemums, Easter Lilies, Ferns, Gardenias, Geranium, Hibiscus Foliage, Jade Plant, New Guinea Impatiens, Palms, Philodendron, Portulaca, Reigor Begonias, Zinnias	Aphids, Fungus Gnat, Leafminers, Mealybugs, Scales (soft & hard), Spider Mites, Whitefly*	2.5 – 5.0 Tbs.	Do not use on Coconut Palms or Maidenhair Ferns. The blooms of Chrysanthemum and Geranium have shown Phytotoxic symptoms at the 5 tablespoon rate. Frequency of Application: <i>For the greenhouse pests listed, use once a week initially, then as the pest is controlled, decrease the frequency to every 2-3 weeks as needed.</i>
Dieffenbachia, Poinsettias		2.5 Tbs.	Do not use on Poinsettia bracts.
Leaf Polish for Hardy Plants		2.5 Tbs.	

**Horticultural and Dormant Spray Oil is most effective on Whitefly during immature stages.*

FOR HOUSEPLANTS AND HOME GREENHOUSES

- Do not exceed the maximum rates or apply more often than indicated on this label.
- Certain plant species may be sensitive to oil. A small number of plants should be test sprayed prior to general spraying.
- Use caution on open blooms – bleaching and spotting have been observed on the open bloom of certain plants.

FRUITS

Crop (Site)	Pest	Application Rate	Time of Application
Blueberry	Thrips Mites Sawfly (eggs) Scales	5.0 Tbs. (2½ fl. oz.) with 1 gal. of water (2% actual oil solution)	Foliage
		7.5 Tbs. (3¾ fl. oz.) with 1 gal. of water (3% actual oil solution)	Dormant
Strawberry	Aphids Mites	2.5 Tbs. (1¼ fl. oz.) with 1 gal. of water (1% actual oil solution)	Dormant (and Foliage)
Grape	Mealybugs	10-15 Tbs. (5-7½ fl. oz.) with 2-3 gal. of water (2%-3% actual oil solution)	Dormant – A tank mix with an insecticide improves control.

21
21

VEGETABLES

Crop (Site)	Pest	Application Rate	Time of Application
Asparagus, Beans, Beets, Corn, Pepper, Radish, Squash, Tomato	Aphids, Mites, Beetle Larvae, Leafminers, Thrips, Leafhopper, Whitefly	2.5 – 5.0 Tbs. (1¼-2½ fl. oz.) with 1 gal. of water (1%-2% actual oil solution)	As needed

IMPORTANT: Do not spray again with oil for at least a month. Do not spray drought injured or winter burned plants. Do not apply oil sprays within 30 days of sulfur applications. Injury may result if oil sprays are used on ferns, palms, hibiscus, certain conifers including blue spruce, white pine, arborvitae and junipers, and certain deciduous trees such as Japanese maple, beech, hickory, walnut and butternut.

To determine actual oil percentage, consult dilution table.

When used in knapsack or small sprayer, shake occasionally to keep solution agitated.

STORAGE AND DISPOSAL

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

<p>Pesticide Storage: Store and transport in an upright position. Keep container tightly closed to prevent evaporation. Do not use, pour, spill or store near heat or open flame. Store in a cool dry area inaccessible to children or pets.</p>

<p>Pesticide Disposal: <i>If partly filled</i> – Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.</p>
--

<p>Container Disposal: <i>If empty</i> – Nonrefillable container. Do not reuse or refill this container. Place in trash or offer for recycling if available.</p>

For information on pesticide products (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

WARRANTY

Seller warrants that this product complies with the specifications expressed in this label. To the extent consistent with applicable law, Seller makes no other warranties, and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for the intended purpose. To the extent consistent with applicable law, Seller's liability or default, breach or failure under this label shall be limited to the amount of the purchase price. To the extent consistent with applicable law, Seller shall have no liability for consequential damages.

Bonide Products, Inc.
6301 Sutliff Road
Oriskany, NY 13424