

Broad Spectrum Insecticide and Miticide

# Ecotec®

**KEEP OUT  
OF REACH OF  
CHILDREN  
CAUTION**

Active Ingredients	
Rosemary Oil	10.0%
Peppermint Oil	2.0%
Other Ingredients*	88.0%
Total	100.0%

\* Isopropyl myristate, Isopropyl alcohol, Polyglyceryl oleate, Butyl lactate and Vanillin.

This product has not been registered by the United States Environmental Protection Agency. Brandt Consolidated, Inc. represents that it is exempt from registration under the Federal Insecticide, Fungicide and Rodenticide Act [FIFRA § 25(b)] as a minimum risk pesticide.

**OMRI®**  
Listed

**NET CONTENTS: 2.5 GALLONS (9.46 L)**

2012-07

**BRANDT**

Manufactured for:

**Brandt Consolidated, Inc.**

2935 South Koke Mill Road  
Springfield, Illinois 62711 USA

## PRECAUTIONARY STATEMENTS

**CAUTION:** Good safety practices are recommended when using any pesticide, such as avoiding contact with eyes and skin and keeping out of reach of children. If product gets in eyes, flush with plenty of water. If on skin, wash thoroughly with soap and water. If irritation persists, contact a physician. **ENVIRONMENTAL HAZARDS:** Avoid direct contact to water; not for aquatic use. This product may be toxic to bees so avoid application when bees are actively foraging. **PHYSICAL OR CHEMICAL HAZARDS:** Do not use, pour, spill or store near heat or open flames. Store only in original container.

## GENERAL INFORMATION

ECOTEC is a broad spectrum, contact insecticide/miticide. It controls pests such as, but not limited to: aphids, thrips, whiteflies, mites, cabbage looper, and armyworm. Use lower rates for light to moderate insect infestations and higher rates for heavy infestations. Repeat application as required to maintain the desired level of control.

## DIRECTIONS FOR USE

Use only according to label instructions. Read the entire label before using this product.

### Plant Safety

The use directions of this product are based on the results of product testing programs on a wide variety of plants. However, not all plant species and their varieties and cultivars have been tested with ECOTEC applied alone or with possible tank mix combinations, sequential pesticide treatments, and adjuvants and surfactants. Local conditions also can influence plant tolerance and may not match those under which testing has been conducted. Therefore, before using ECOTEC, test the products on a sample of the plant and/or seedling. Do not apply on plants when the temperature is 90° F or above.

**Preharvest Interval:** ECOTEC may be applied to crops at any time up to and including the day of harvest.

### Mixing Instructions

SHAKE WELL BEFORE USING. To maintain a homogeneous spray mixture, constant agitation or recirculation is required. The use of adjuvants (spreaders and/or penetrants) is highly recommended for improving performance. Always read and follow label directions for adjuvants.

Add ECOTEC to one-half (1/2) tank\* under agitation containing water of 45° F or greater before filling to desired level. When combining with other products, such as adjuvants, insecticides, fungicides, or fertilizers, add these products first when the tank is approximately 1/2 full. Ensure that there is good agitation while mixing for complete emulsification. Maintain agitation during spray application.

\* In areas with hard water (water with a total hardness of greater than 200 ppm) it is recommended to completely fill tank with water first and then add a water softener, mix thoroughly, add the appropriate quantity of ECOTEC, and mix thoroughly. It is critical that the water softener be added to the entire quantity of water and mixed thoroughly before introducing the ECOTEC to achieve maximum emulsion.

### Application Instructions

ECOTEC can be applied through most standard or field type sprayers after dilution and mixing with water in accordance with label instructions. For best results, spray coverage should be uniform and complete. Spray droplet size should be adjusted to maximize coverage, minimize drift, and allow application to the intended exposure area only. Apply spray solutions in properly maintained and calibrated equipment capable of delivering the desired volumes. Always clean tank, pump and lines thoroughly with water after use.

**Boom Equipment:** For best insect control using hydraulic or hydraulic air assist equipment, use the recommended rate of this product in sufficient gallons of spray solution per acre as a broadcast spray. Spray should thoroughly wet foliage but not run off.

**Hand-held and High Volume Equipment:** Spray-to-wet applications of this product may be made with knapsack and backpack sprayers, pump-up pressure sprayers, hand-guns, hand wands, and other hand-held spray equipment and vehicle mounted high volume spray equipment. For the most efficient use of spray mixture, spray all leaf surfaces uniformly and completely to wetness.

**Aerial Applications:** Prior to application, check the aircraft/helicopter spray equipment for uniformity of spray pattern, spray width and output. Apply a minimum of 15 gallons per acre of diluted product. Optimum results are obtained when plant foliage is not too dense. **COVERAGE IS ESSENTIAL FOR GOOD CONTROL.** Use an output that will ensure optimum product penetration and coverage. Make aerial applications when the wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Low humidity and high temperature increase the evaporation rate of spray droplets and therefore the likelihood of good coverage. Use the largest droplet size consistent with good pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orientating nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure. Spray should be released at the lowest height consistent with pest control and flight safety. Application more than 10 feet above the crop canopy is not recommended.

## AGRICULTURE APPLICATION RATES

Spray when pests first appear. Repeat application every 5-7 days.

<b>CROPS INCLUDING, BUT NOT LIMITED TO</b>	<b>INSECTS/MITES INCLUDING, BUT NOT LIMITED TO</b>	<b>APPLICATION RATE IN 100 GALLONS PER ACRE FOR GROUND APPLICATIONS</b>
<b>Legume &amp; Fruiting Vegetables</b> Beans, Eggplants, Lentils, Peas, Peanuts, Peppers, Tomatoes	Aphids, Whiteflies, Beetles, Two-Spotted Spider Mite, Plant Bugs, Thrips and Early Stages of Caterpillars	<b>1.0 - 4.0 Pints</b>
<b>Bulb, Cole &amp; Leafy Vegetables</b> Broccoli, Cabbage, Cauliflower, Celery, Garlic, Lettuce, Onions, Spinach	Aphids, Whiteflies, Beetles, Two-Spotted Spider Mite, Plant Bugs, Thrips and Early Stages of Caterpillars	<b>1.0 - 4.0 Pints</b> For onion: Use 1.0 - 5.0 pints.
<b>Cucurbits</b> Cantaloupes, Cucumbers, Melons, Squashes, Watermelons	Aphids, Whiteflies, Beetles, Two-Spotted Spider Mite, Plant Bugs, Thrips and Early Stages of Caterpillars	<b>1.0 - 4.0 Pints</b>
<b>Root &amp; Tuber Vegetables</b> Carrots, Potatoes, Radishes, Sweet Potatoes, Turnips	Aphids, Plant Bugs, Potato Leafhoppers, Two-Spotted Spider Mite and Thrips	<b>1.0 - 4.0 Pints</b>
<b>Alfalfa</b>	Aphids, Leafhoppers, Plant Bugs, Thrips and Early Stages of Caterpillars	<b>1.5 - 4.0 Pints</b>
<b>Herbs &amp; Spices</b> Anise, Basil, Dill, Mint, Peppermint, Spearmint, Thyme, Wintergreen	Aphids, Leafhoppers, Plant Bugs, Thrips and Early Stages of Caterpillars	<b>1.0 - 3.0 Pints</b>
<b>Small Fruits &amp; Berries</b> Blackberries, Blueberries, Cranberries, Raspberries, Strawberries	Aphids, Leafhoppers, Mealybugs, Whiteflies, Lygus Bugs, Thrips, Two-Spotted Spider Mite, Pacific Spider Mite, McDaniel Mite, European Red Mite and Early Stages of Leafrollers and Caterpillars	<b>1.0 - 4.0 Pints</b>
<b>Grapes and Hops</b> Grapes (Raisin, Table, Wine)	Leafhoppers, Sharpshooters, Two-Spotted Spider Mite, Pacific Spider Mite, Willamette Mite, Thrips, Mealybugs and Early Stages of Leafrollers and Caterpillars	<b>1.0 - 4.0 Pints</b>
<b>Stone Fruits, Pome Fruits</b> Apples, Apricots, Cherries, Peaches, Nectarines, Olives, Pears, Plums, Prunes, Pomegranates and Persimmons	Aphids, Thrips, Leafhoppers, Psylla, Scales, Two-Spotted Spider Mite, Pacific Mite, McDaniel Mite, European Red Mite, Early Stages of Leafrollers and Caterpillars	<b>1.0 - 4.0 Pints</b>
<b>Citrus and Sub Tropicals</b> Avocados, Lemons, Grapefruit, Oranges, Papayas, Bananas, Plantains, Mangos	Aphids, Thrips, Scales, Two-Spotted Spider Mite, Pacific Mite, Citrus Red Mite, Citrus Rust Mite, European Red Mite, Early Stages of Leafrollers and Caterpillars	<b>2.0 - 5.0 Pints</b>

For aerial applications use a minimum of 15 gallons of spray volume per acre. Complete coverage of foliage is essential to achieve control. The foliage should be completely WET, but avoid runoff. The use of a spreader and/or penetrant adjuvant improves product performance.

## AGRICULTURE APPLICATION RATES

Spray when pests first appear. Repeat application every 5-7 days.

CROPS INCLUDING, BUT NOT LIMITED TO	INSECTS/MITES INCLUDING, BUT NOT LIMITED TO	APPLICATION RATE IN 100 GALLONS PER ACRE FOR GROUND APPLICATIONS
<b>Nuts</b> Almonds, Cashews, Pecans, Pistachios, Walnuts	Aphids, Thrips, Two-Spotted Spider Mite, Pacific Mite, McDaniel Mite and European Red Mite	<b>1.0 - 4.0 Pints</b>
<b>Field Crops</b> Corn, Cotton, Sorghum, Soybeans, Sweet Corn, Tobacco	Aphids, Soybean Aphid, Beetles, Whiteflies, Two-Spotted Spider Mite, Plant Bugs, Thrips, and Early Stages of Caterpillars	<b>2.0 - 4.0 Pints</b>
<b>Christmas Trees</b> Caution: Certain adjuvants may affect coloration of blue spruce	Mites and Aphids	<b>1.0 - 4.0 Pints</b>
<b>Backyard Fruit and Nut Trees</b>	Mites and Aphids	12 - 48 fl oz. Use sufficient water to get thorough coverage.
<b>Mushroom Houses</b>	Mushroom flies (Phorids and Sciarids)	4 - 8 fl oz per gallon - Spray dilution on outside and inside walls, floors, and sideboards of mushroom houses after compost has been pasteurized by heating. Also spray over the plastic covering the beds and trays after spawning. Retreat as needed.

For aerial applications use a minimum of 15 gallons of spray volume per acre. Complete coverage of foliage is essential to achieve control. The foliage should be completely WET, but avoid runoff. The use of a spreader and/or penetrant adjuvant improves product performance.

## PESTS CONTROLLED THROUGH DRIP IRRIGATION SYSTEMS

(including but not limited to): Cutworms, Wireworms, Root Maggots, Symphylans, and Crickets.

**CROPS TREATED BY DRIP IRRIGATION** (including but not limited to): Beets, Brussels Sprouts, Cabbage, Chinese Broccoli, Broccoli, Chinese Cabbage, Chinese Mustard, Cauliflower, Collard, Endive, Garlic, Ginseng, Kale, Melons (Cantaloupes, Casabas, Honeydew, Muskmelons, Persians, and Watermelons), Onions (bulb and green), Parsnips, Potatoes, Sweet Potatoes, Spinach, Strawberries, Sugar Beets, Sweet Corn, Tomatoes.

Apply ECOTEC through the drip irrigation systems at a rate of 2 pints per acre of plant bed as a preventative treatment or when pest infestation is low to moderate and 4 pints per acre of plant bed when pest infestation is high. Apply 2 to 3 applications of ECOTEC over a 7 to 14 day schedule. Refer to local extension recommendations for additional information regarding pest populations and thresholds.

ECOTEC can be applied at any time during the crop cycle, from the time of planting to the harvest and there are no restrictions on the number of applications per season. For drip irrigation systems, set the emitter spacing and the line pressure to give the best bed coverage and reduce loss of chemigation products through leaching.

BED SPACING	LINEAR FEET OF BED TO EQUAL ONE ACRE	ECOTEC, 2 PINTS/ACRE RATE/1000 ROW FEET	ECOTEC, 4 PINTS/ACRE RATE/1000 ROW FEET
36 inches	14,520 ft	2.2 fl oz	4.4 fl oz
48 inches	10,890 ft	2.9 fl oz	5.8 fl oz
60 inches	8,712 ft	3.7 fl oz	7.4 fl oz
72 inches	7,260 ft	4.4 fl oz	8.8 fl oz

## USE RATES FOR OUTDOOR PLANTS INCLUDING TREES, LANDSCAPES, TURFGRASS, NURSERY, AND ALL OUTDOOR ORNAMENTAL PLANTS

Spray when pests first appear. Repeat application every 5-7 days.

PEST INCLUDING, BUT NOT LIMITED TO	FL OZ/10 GAL SPRAY SOLUTION	FL OZ/100 GAL SPRAY SOLUTION
<b>APHIDS:</b> Green Peach aphids, Pea aphids, Cotton aphids, Rose aphids	2.0 - 4.0	20 - 40
<b>BEETLES:</b> Colorado potato Flea beetles, Japanese beetles, Leaf beetles, Mexican bean beetles, Rose chafers, Twig girders	3.2 - 6.4	32 - 64
<b>BUGS:</b> Box elder bugs, Chinch bugs, Lygus bugs, Spittle bugs	1.6 - 4.8	16 - 48
<b>Early Stages of Caterpillars:</b> Armyworms, Cutworms, Fruitworms, Gypsy moths, Hornworms, Leafrollers, Navel orange worms, Pine tip moths, Sod webworms, Tent caterpillars, Tobacco budworms, Tussock moths	1.6 - 3.2	16 - 32
<b>FLIES:</b> Cherry maggots, Crane flies, Midges	2.0 - 4.0	20 - 40
<b>LEAFHOPPERS:</b> Variegated leafhoppers and Sharpshooters	3.2 - 6.4	32 - 64
<b>LEAF MINERS:</b> Azalea leaf miners, Citrus leaf miners, Blotch leaf miners, Boxwood leaf miners	1.6 - 4.8	16 - 48
<b>MEALYBUGS:</b> Apple mealybugs, Citrus meal bugs, Grape mealybugs	1.6 - 4.8	16 - 48
<b>MITES:</b> Two-Spotted Spider mite, Broad mite, Citrus budmite, Cyclamen mite, Rust mite	1.6 - 4.8	16 - 48
<b>PSYLLIDS:</b> Pear psylla	1.6 - 4.8	16 - 48
<b>SAWFLIES:</b> European pine sawflies, Pear sawflies, Red-headed pine sawflies, Yellow-headed pine sawflies.	1.6 - 3.2	16 - 32
<b>Crawler stages of SCALES:</b> Black scales, Brown soft scales, California red scales, Coffee scales, Olive scales, San Jose scales	1.6 - 4.8	16 - 48
<b>THRIPS:</b> Citrus thrips, Onion thrips, Western flower thrips	3.2 - 6.4	32 - 64
<b>WHITEFLIES:</b> Greenhouse whiteflies, Silverleaf whiteflies, Woolly whiteflies	1.6 - 3.2	16 - 32

For aerial applications use a minimum of 15 gallons of spray volume per acre. Complete coverage of foliage is essential to achieve control. The foliage should be completely WET, but avoid runoff. The use of a spreader and/or penetrant adjuvant improves product performance.

## USE RATES FOR ANY PLANTS GROWN INDOORS OR IN GREENHOUSES, SHADEHOUSES, INTERIORSCAPES, AND NURSERIES

Spray when pests first appear. Repeat application every 5-7 days.

PESTS INCLUDING, BUT NOT LIMITED TO	FL OZ/10 GAL SPRAY SOLUTION	FL OZ/100 GAL SPRAY SOLUTION
<b>APHIDS:</b> Green Peach aphids, Pea aphids, Cotton aphids, Rose aphids	2 - 4	20 - 40
<b>BETTERLES:</b> Flea beetles, Leaf beetles	2.0 - 4.8	20 - 48
<b>Early Stages of Caterpillars:</b> Armyworms, Leafrollers, Loopers, Webworms	1.6 - 3.2	16 - 32
<b>FLIES:</b> Fungus gnats, Shore flies	1.6 - 3.2	16 - 32
<b>LEAFHOPPERS:</b> Grape leafhoppers, Potato leafhoppers	1.6 - 3.2	16 - 32
<b>LEAF MINERS:</b> Azalea leaf miners, Citrus leaf miners, Blotch leaf miners, Boxwood leaf miners	1.6 - 3.2	16 - 32
<b>MEALYBUGS:</b> Citrus mealybugs, Long-tailed mealybugs	1.6 - 3.2	16 - 32
<b>MITES:</b> Two-Spotted Spider mite, Broad mite, Citrus budmite, Cyclamen mite, Rust mite	1.6 - 4.8	16 - 48
<b>SOFT SCALES (Crawler Stages)</b>	1.6 - 4.8	16 - 48
<b>THRIPS:</b> Western flower thrips	3.2 - 6.4	32 - 64
<b>WHITEFLIES:</b> Greenhouse whiteflies, Silverleaf whiteflies	1.6 - 3.2	16 - 32

For aerial applications use a minimum of 15 gallons of spray volume per acre. Complete coverage of foliage is essential to achieve control. The foliage should be completely WET, but avoid runoff. The use of a spreader and/or penetrant adjuvant improves product performance.

## STORAGE AND DISPOSAL

Store in original container in a cool, dry area out of reach of children. Avoid excessive heat and freezing temperatures. Keep container tightly closed during storage. Do not reuse container. Offer for recycling if available or discard in trash.

## Warranty

Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use; but neither this warranty nor any other warranty of merchantability or fitness of a particular product expressed or implied, extends to the use of this product contrary to label conditions, or under conditions not reasonably foreseeable to the seller; and buyer assumes the risk of any such use.