# EcoVia™ EC Emulsifiable Insecticide Concentrate

# Contains natural plant oils

# Research-Based Botanical Insecticide

# Keep Out of Reach of Children CAUTION

# Safe and Effective when used and stored as directed National Organic Program Compliant

Active Ingredients: Thyme Oil.....20.0% Phenethyl Propionate......14.0% Rosemary Oil.....8.0%

Other Ingredients.....58.0% (Polyglyceryl Oleate, Isopropyl Alcohol, Wintergreen Oil, Isopropyl Myristate)

Total.....100.0% FIFRA 25(b) exempt product

# DIRECTIONS FOR USE

# READ ENTIRE LABEL — USE IN ACCORDANCE WITH LABEL INSTRUCTIONS

# PRECAUTIONS AND NOTICES:

- May cause eye and skin irritation. Avoid contact with eyes, skin and clothing. Protective eyewear and nitrile or other chemical resistant gloves are recommended. Applicator should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if the product gets inside. Wash thoroughly and put on clean clothing. Remove PPE after handling this product. Wash the outside of the gloves before removing.

-Do not use, pour, spill or store near heat or open flame.

-Do not use water base sprays of product in conduits, junction boxes, or other electrical equipment because of possible shock hazard.

-Product contains botanical oils that are inherently fragrant. When used in confined spaces, prolonged exposure to the scent may be objectionable to some individuals.

-Product diluted per the label has not stained, discolored or caused damage to painted or varnished surfaces, fabrics, or other surfaces in testing. However, test treat a small non-visible area and allow to dry, to determine whether staining or discoloration will occur. If overspray lands on any sensitive surfaces (particularly plastics), simply rinse with water and wipe off with a clean cloth. Liquid soap may be used for clean up if needed. Concentrate will likely damage susceptible materials such as thin plastics.

-Product has not shown phytotoxicity in testing when used as directed, but all plant types have not been tested, so if concerned about particular plant sensitivity, test treat a small area first and wait 48 hours to determine if burning occurs.

**GENERAL PESTS INCLUDE BUT ARE NOT LIMITED TO:** Ants, Biting flies, Blow flies, Bat bugs, Bed bugs, Blue/green bottle flies, Boxelder bugs, Brown marmorated stink bugs, Carpenter ants, Carpenter bees, Carpet beetles, Cigarette beetles, Clothes moths, Cluster flies, Cockroaches, Flour beetles, Crickets, Darkling beetles, Dermestids, Drain flies, Dung flies, Drugstore beetles, Earwigs, Face flies, Fleas, Firebrats, Fruit flies, Gnats, Ground-nesting wasps and bees, Hornets, House flies, Indianmeal moths, Kudzu bugs, Lice, Midges, Millipedes, Mites, Multi-colored Asian lady beetles, Mosquitoes, Phorid flies, Other pantry beetles & moths, Sciarid flies (fungus gnats), Silverfish, Spiders, Springtails, Stable flies, Stink bugs, Termites\*, Ticks, Wasps, Wooddestroying beetles, Western conifer seed bugs, and Yellow jackets

\* This product is not recommended as sole protection against termites and is not approved as a preconstruction treatment for subterranean termites.

## TREE, SHRUB AND VEGETATION PESTS INCLUDE BUT ARE NOT LIMITED TO:

Aphids, Armyworms, Bagworms, Beetles, Billbugs, Chinch bugs, Chiggers, Cutworms, Grasshoppers, Grubs, Japanese beetles. Lace Bugs, Mealybugs, Mole crickets, Mites, Scale insects, Sod webworms, Tent caterpillars, Thrips, and Whiteflies

**USE SITES:** In and around structures, including but not limited to: residential, multi-family, commercial, industrial, municipal, institutional, retail, research, recreational, health care, educational, daycare, hospitality and agricultural buildings and other man-made structures, furniture and bedding (see notice below regarding staining), feed lots, fence lines, garages, greenhouses, sheds, outbuildings, indoor plantscapes, mausoleums, boat houses and boat docks, around and over marshes, waterways, lakes, ponds, stagnant and ornamental water, vent stacks, drains and sewers, urban areas, animal rearing and handling establishments, food service, handling and/or processing establishments, mushroom houses, kennels and zoos. Turf sites include but are not limited to: lawns, trees, bushes and shrubs, landscape beds, ornamental turf, parks, playgrounds, recreational areas, right-of-ways, and golf courses. Transport vehicles, including: trucks, trailers, trains, rail cars, buses, boats, marine vessels and other cargo vessels. Not for use directly on crops or animals grown for food, or on food contact surfaces in food handling establishments, unless food contact surfaces are thoroughly washed with soap and water after treatment.

## MIXING INSTRUCTIONS AND APPLICATION EQUIPMENT:

**Shake well before using.** EcoVia EC should be mixed with water or oil and applied with a handed pressurized compressed air sprayer, backpack sprayer or mist blower, power sprayer, mechanical aerosol misting/fogging equipment, ULV foggers, automated spray systems or other conventional application equipment. Clean spray equipment before use. Add approximately half of the required amount of water or oil to the tank and then add the appropriate amount of product, agitate and add the remaining water or oil. Apply the solution until surfaces are wet, but not to the point of run-off. Product requires only light agitation in spray systems after concentrate has been diluted. When diluting with water, prepare only the amount needed for use within 12 hours and maintain light agitation during use. Do not store spray solution overnight. After applications, rinse the tank with clean water, pressurize the tank and flush the valve and hose.

## **INDOOR USE**

Pests	Concentration of Active Ingredient	Dilution Rate in Water	Application Rate of Solution	Application Method
Crawling insects Light infestation Heavy infestation	0.3% 0.6%	Up to 1.0 oz/gal Up to 2.0 oz/gal	1 gallon/1000 sq ft	Apply using hand pressurized compressed air sprayer as a coarse,
Ticks, Fleas and Bed Bugs	0.6%	Up to 2.0 oz/gal	1 gallon/1000 sq ft and/or spot application	wet spray -Broadcast Surface Spray -Crack & Crevice Treatment -Spot Treatment
Flying insects	0.3%	Up to 1.0 oz/gal	1 gallon/1000 sq ft	Apply as noted above, or using a mister/fogging unit
Stinging insects	0.6%	Up to 2.0 oz/gal	Spot application	Apply as noted above, or using a mister/fogging unit

#### **APPLICATION RATES FOR INDOOR STRUCTURAL PESTS**

**CRAWLING INSECT PESTS GENERAL PEST CONTROL:** Dilute product at the rate of up to 1 to 2 fluid ounces per gallon (use lower rate for maintenance service and higher rates for active infestations) and apply at the rate of 1 gallon per 1000 square feet or until area is damp. Treat areas where pests are present, or where pests normally feed, find shelter, or travel. Thoroughly spray all cracks and crevices where insects may hide or enter the building. Some of these areas include baseboards, floorboards, corners, around water and utility pipes, behind and under refrigerators, cabinets, sinks, behind and beneath equipment and appliances, around floor drains, window and door frames and other possible pest harborage sites. Do not apply directly to house plants. Cover/avoid any pools or aquaria prior to spraying.

**ANT CONTROL:** Dilute product at the rate of up to 1 to 2 fluid ounces per gallon (use lower rate for maintenance service or smaller ants and higher rates for active infestations and larger ant species) as a spot treatment until the area is damp. Apply to ant trails, cracks, and crevices where ants are entering the structure, feeding or travelling. Remove food sources.

**FLYING AND STINGING INSECT CONTROL:** Dilute product at the rate of up to 1 to 2 fluid ounces per gallon (use lower rate for maintenance service and higher rates for active infestations) and apply as a spot treatment in areas where insects rest, mate, or enter the structure such as window frames, doors, light fixtures, and other surfaces that attract flying insects. Apply spray to nests of stinging insects in the early morning or late evening when the highest number of insects will be at the nest site. (Use higher rates for stinging insects.)

**TICKS AND FLEAS:** Dilute product at the rate of up to 2 fluid ounces per gallon and apply until area is damp. Treat infested areas such as pet beds and resting areas, carpeted floors, cracks, voids, crevices, and other harborage areas nearby the infested areas. Do not spray this product directly on pets. Thoroughly clean, or replace, all pet bedding after infestation is eliminated. Pets in infested quarters should be treated with an appropriately labeled on-animal treatment.

**BED BUGS**: Dilute product at the rate of up to 2 fluid ounces per gallon. Remove bedding and take the bed apart. Treat the interior framework, joints and cracks in the bed frame. Treat the mattress and box spring, paying particular attention to tufts, folds and edges, and the interior framework of the box spring. Remove wall-mounted head boards and treat the back side. Treat picture frames, moldings, hollow furniture legs, cracks and crevices, along baseboards, and any areas with visible signs of infestation, including rugs and carpet. Treat upholstered furniture by removing or lifting (if possible) the cushions and treating the

undersurface. Treat the interior framework, cracks and joints of the furniture, and the folds, tufts and edges of cushions and other upholstered areas. Do not treat toys and stuffed animals with product.

**FOGGING:** Dilute product at the rate of up to 2 to 4 fluid ounces per gallon as a space spray through conventional fogging equipment or misting systems (lower rates are recommended in food facility applications) and apply at the rate of 1 to 3 fluid ounces per 1000 cubic feet filling the area with mist or fog.

**FOOD PROCESSING PLANTS, INCLUDING FEDERALLY INSPECTED:** All food and food products should be removed or covered during treatment when using product as an area space spray/fog in food processing plants. Do not apply as a space spray/fog while facility is in operation. Cover all food processing surfaces and equipment during treatment or clean with detergent and rinse thoroughly with potable water before facility operations commence. Also cover any sensitive surfaces (plastics, storage containers, vinyl, etc). Close and shut off air conditioning and ventilating equipment. All persons must vacate the treated area. Ventilate treated areas before reoccupying. Food processing operations may continue when this product is applied as a crack and crevice treatment only, with care and in accordance with the directions and precautions provided herein. Treat all accessible cracks and crevices using a compressed air sprayer at the rate of 1 to 2 fluid ounces per gallon directly before fogging for maximum effect.

**Note:** For oil dilutions that are applied in food handling establishments, a deodorized petroleum oil which conforms to CFR 21 (especially section 172.884) is required (such as Exxon Isopar M, Ashland Low Odor Base Solvent or equivalent). Tank mix applications must be made in accordance with the more restrictive of label limitations and precautions. No label dosages may be exceeded. This product cannot be tank mixed with any product with label prohibitions against such mixing. Fogging oils may create slippery conditions on surfaces. Retreat if reinfestation occurs.

## OUTDOOR USE

Pests	Concentration of	Dilution Rate in Water	Application Method
	Active Ingredient		
Perimeter	0.3-2.8%	1.0-8.0 oz/gal or	Apply using hand
Treatment and		1.0-8.0 oz in sufficient	pressurized or power
Recreational areas		water to cover 1000 sq ft	compressed air sprayer as
Mounding Ants	0.3-0.6%	1.0-2.0 oz/gal	a coarse, wet spray
Ticks and Fleas	0.6-1.2%	2.0-4.0 oz/gal	-Broadcast Surface Spray
Lawn application		2.0-4.0 oz in sufficient	-Crack & Crevice
		water to cover 1000 sq ft	Treatment
			-Spot Treatment
Mosquitoes and	0.3-1.2%	1.0-4.0 oz/gal or	Apply as noted above, or
Flying insects		1.0-4.0 oz in sufficient	using a mister/fogging unit
		water to cover 1000 sq ft	
Stinging insects	0.6-1.2%	2.0-4.0 oz/gal or	Apply as noted above, or
		2.0-4.0 oz in sufficient	using a mister/fogging unit
		water to cover 1000 sq ft	
Lawn, Turf, Grass	0.3-1.8%	1.0-6.0 oz/gal or	Apply as noted above, or
		1.0-6.0 oz in sufficient	using a mister/fogging unit
		water to cover 1000 sq ft	
Ornamental Trees	0.15-0.6%	0.5-2.0 oz/gal or	Apply as noted above
And Shrubs		0.5-2.0 oz in sufficient	
		water to cover 1000 sq ft	

#### APPLICATION RATES FOR OUTDOOR STRUCTURAL PESTS

**PERIMETER TREATMENTS AND RECREATIONAL AREAS:** Dilute product at the rate of 1 to 8 fluid ounces per gallon or 1 to 8 fluid ounces in sufficient water to treat 1000 sq ft (use lower rate for maintenance service and higher rates for active infestations) and apply until area is thoroughly wet. Apply product to a band of soil and vegetation up to 10 feet wide around and adjacent to buildings. Treat the building foundation to a height of 2 to 3 feet. Make specific efforts to spray areas where pest species congregate such as, but not limited to, landscape timbers, mulch, waste receptacles, dumpsters, downspouts, entry points around water pipes and utility penetrations, windows, shutters, porches and porch lights, doors, vents, overhangs, and eaves. Void applications can be made behind veneers and siding, into stone foundations, into block voids and structural voids, wall voids, under slabs, stoops, porches or to the soil in crawlspaces, and other similar voids. Repeat as necessary.

**MOUND DRENCH METHOD - FOR CONTROL OF FIRE ANTS AND OTHER MOUNDING ANTS:** Dilute 1 to 2 fluid ounces of product per gallon. Apply 1 to 2 gallons directly to each mound until it is wet. In addition apply product in a 4 foot diameter circle around the mound to control foraging workers and newly mated queens. Use the higher volume for mounds larger than 12 inches. For best results, apply early morning or during late evening hours.

**MOSQUITO AND FLY CONTROL - OUTDOOR YARD OR BARRIER TREATMENT:** To control adult mosquitoes and other flies, dilute product at the rate of 1 to 4 fluid ounces per gallon or 1 to 4 fluid ounces in sufficient water to treat 1000 sq ft (use lower rate for maintenance service and higher rates for active infestations) and apply until area is thoroughly wet. Treat sites such as trees, shrubbery and other vegetation where mosquitoes or flies may rest, harbor, or breed. Treat any low areas where water has a tendency to to pool. Trees, shrubs, and vegetation around stagnant pools, marshy areas, ponds, shorelines and other areas that collect water may be treated. For best results thoroughly treat the underside of leaves and vegetation, where mosquitoes are most likely to harbor. Repeat as necessary.

**MOSQUITO CONTROL AND OTHER BITING INSECTS - AUTOMATIC SPRAYING SYSTEMS:** To control house flies, horn flies, stable flies, horse flies, mosquitoes and gnats, dilute product concentrate immediately before use at 0.25 to 1.5 ounces per gallon of water (Use lower dilution rates for preventative and maintenance applications). Agitate while adding water and maintain light agitation while system is in use. In automatic spraying or misting systems used for mosquito and fly control, solutions of product may be stored for up to one month, as long as the system has adequate agitation. To dispense diluted concentrate through an automatic spraying system, adjust spray nozzles to deliver 1 ounce of liquid per minute at a maximum of 2,000 cubic feet of space per nozzle. Automatic spraying systems must not be programmed to release pesticides where food or feed is directly exposed.

**STINGING INSECTS:** Dilute product at the rate of 2 to 4 fluid ounces per gallon or 2 to 4 fluid ounces in sufficient water to treat 1000 sq ft (use lower rate for maintenance service and higher rates for active infestations) and apply until area is thoroughly wet. Treat nest, nest entrances, harborage sites, and areas where stinging insects, land, walk, or rest. Applicators should wear protective equipment if applications are made when stinging insects are active. For best results, apply early morning or during late evening hours.

**USE ON LAWNS, TURF GRASS, AND TURF:** Dilute product at the rate of 1 to 6 fluid ounces per gallon or 1 to 6 fluid ounces in sufficient water to treat 1000 sq ft (use lower rate for maintenance service and higher rates for active infestations) and apply until area is thoroughly wet. Exceeding rates may result in phytotoxicity of treated plants.

**USE ON ORNAMENTAL TREES AND SHRUBS:** Dilute product at the rate of 1 to 2 fluid ounces per gallon or 1 to 2 fluid ounces in sufficient water to treat 1000 sq ft (use lower rate for maintenance service and higher rates for active infestations) and apply until foliage is thoroughly wet. Exceeding rate may result in phytotoxicity of

treated plants. A small-scale test is recommended to verify safety to ornamental plants. While phytotoxicity testing has been carried out on ornamental plants under various environmental conditions, and no phytotoxicity has been observed, certain cultivars may be sensitive to the final solution.

USE	INSECT	DILUTION RATE	REMARKS
UJL		DIEOTION NATE	nemanika
Not for use on animals to be slaughtered for food. Livestock Spray for breeding stock and recreational animals (Cattle, Swine, Horses, Goats and Sheep)	To control flying insects, including, but not limited to: Flies, House Flies, Deer Flies, Stable Flies and aids in the control of Face Flies	0.5- 1.5 oz per gal of mineral oil USP	Dilute in mineral oil USP as indicated and spray directly on the animal in sufficient amounts for proper coverage.
	Ticks and Lice	0.5- 1.5 oz per gal of mineral oil USP	Apply as above
Livestock Spray (Dairy Cattle and Goats)	To control flying insects, including, but not limited to: Flies, House Flies, Deer Flies, Stable Flies and aids in the control of Face Flies	0.5- 1.5 oz per gal of mineral oil USP	Dilute in mineral oil USP as indicated. Direct spray to cover thoroughly. Repeat as necessary. No milk discard is required. Care should be taken that the spray does not come in direct contact with the lactating animal's teats unless they are washed with an approved cleansing solution and dried before milking. Apply the spray at least 20 min. prior to milking or after milking has been complete.
	Ticks and Lice	0.5- 1.5 oz per gal of mineral oil USP	Apply as above
Poultry – Layers and Breeding Stock	Poultry Lice, Bed Bugs, Bat Bugs and Mites	1.0- 2.0 oz per gal of mineral oil USP	Spray roosts, roost poles, walls (especially cracks in walls), and nests or cages thoroughly. It is not necessary to remove poultry from the housing unit during treatment. This should be followed by spraying over the birds with a fine mist.
Residual Surface Spray	Flies, Gnats, Litter Beetles, Darkling Beetles (lesser meal worms) Mosquitoes, Spiders, Wasps	2 to 3 ounces per gal of water or mineral oil USP	Apply 1 gallon of solution per 500 - 1000 sq. ft. Thoroughly cover walls, ceilings or other areas where pests rest or congregate in dairy barns, horse barns, poultry houses, swine buildings, livestock sheds, and other farm buildings.
Larvacide	Maggots (fly larvae)	2 to 4 ounces per gal of water or mineral oil USP	Apply 1 gallon of solution per 100 sq. ft. of droppings as a coarse spray. Repeat at 7 - 10 day intervals until droppings begin to cone up, then treat only "hot spots" (small areas found to have large number of maggots).

# LIVESTOCK FACILITIES

FIRST AID		
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a physician if irritation persists.</li> </ul>	
IF ON SKIN:	Wash exposed area thoroughly with soap and water.	
IF INHALED:	<ul> <li>Move exposed person(s) to fresh air.</li> <li>If breathing problems persist, get medical attention.</li> </ul>	
IF INGESTED:	<ul> <li>Rinse mouth out with water.</li> <li>Do not induce vomiting.</li> <li>Obtain medical attention if feeling sick or nauseous.</li> </ul>	
Seek medical attention if necessary.		

## **STORAGE & DISPOSAL**

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

## FOR HALF GALLON OR LARGER CONTAINERS:

**SPILL PROCEDURES:** In case of significant spill or leakage, soak up with an absorbent material such as purpose made socks or pads, or use sand, sawdust, corncob grit, soil, fuller's earth, etc. Dispose of with trash. **STORAGE:** Store upright in original container in an area inaccessible to children and pets. Avoid exposure to extreme temperatures.

**CONTAINER DISPOSAL:** Triple rinse and place in trash or offer for recycling if available. **If partly filled:** Call your local solid waste agency or **1-800-CLEANUP** which is managed as a public private partnership.

## FOR CONTAINERS SMALLER THAN ONE HALF GALLON:

**STORAGE:** Store upright in original container in an area inaccessible to children and pets. Avoid exposure to extreme temperatures.

**DISPOSAL:** Do not reuse container. Offer for recycling or dispose of in trash.

## **Conditions of Warranty and Limitations of Liability**

IMPORTANT: READ BEFORE USE Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability. CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Manufacturer. All such risks shall be assumed by the user or buyer. DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, Manufacturer makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Manufacturer is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Manufacturer disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product. LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Manufacturer's election, the replacement of product.

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