



Evolver 4-4 ULV

For Application only by Public Health Officials, and Trained and Qualified Personnel of Mosquito Abatement Districts and Other Mosquito Control Personnel.

READ ENTIRE LABEL BEFORE USING READY TO USE!

Active Ingredients:

- *Permethrin 4.0%
- **Piperonyl Butoxide Technical 4.0%
- Other Ingredients*** 92.0%
- Total: 100.0%

* (3-phenoxyphenyl)methyl(+/-)Cis/trans 3-(2,2-dichloroethenyl)2,2-Dimethyl cyclopropanecarboxylate.
 cis/trans ratio: min. 35% (+/-) cis and max. 65% (+/-) trans.

**Equivalent to 80% (butylcarbityl)(6-propylpiperonyl) ether and 20% related compunds.

***Contains a petroleum distillate solvent

Contains 0.29 pounds of Permethrin and 0.29 pounds of Piperonyl Butoxide per gallon.

EPA Reg. No 769-982 EPA Est. No. 44616-MO-1
RM#10056

This product is Ready-To-Use as an All Temperature, Quick Knockdown, Low Odor, Non-Corrosive Synergized Synthetic Pyrethroid for Control of Adult Mosquitoes, Biting and Non-Biting Midge, Black flies and other outdoor flying insects as listed on this label which cause Public Health annoyance in Residential, Municipal and Recreational Areas.

KEEP OUT OF REACH OF CHILDREN CAUTION

“PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta haya sido explicado ampliamente” (If you do not understand the label, find someone to explain it to you in detail).

First Aid	
If Swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person.
If in Eyes:	<ul style="list-style-type: none"> • 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.
If on Skin:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 – 20 minutes. • Call a poison control center or doctor for treatment advice.
If Inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further advice.
Hot Line Number: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also call 1-800-858-7378 for emergency medical treatment advice. See below for additional Precautionary Statements.	
Note to Physician: Solvent presents an aspiration hazard. Gastric lavage is indicated if material was taken internally. Vomiting may cause aspiration pneumonia.	

STORAGE AND DISPOSAL continued	
Container Disposal: (Metal) Triple rinse or equivalent. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by other approved State and local procedures. (Plastic) Triple rinse or equivalent. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.	
Container Disposal for Refillable Containers: Replace the dry disconnect cap, if applicable, and seal all openings which have been opened during use.	
<i>This product will not dilute with water.</i>	

RATES CHART FOR Evolver 4-4 ULV USE, UNDILUTED						
CONDITIONS AND RATES TO USE Evolver 4-4 ULV UNDILUTED FOR MOSQUITO CONTROL						
Permethrin lbs. A.I./Acre	PBO lbs. A.I./Acre	Application Rates				Fluid Ounces and (milliliters) per acre
		Fluid Ounces per Minute at mph				
		5 mph	10 mph	15 mph	20 mph	
0.00700	0.00700	9.40	18.80	28.20	37.60	3.10 (91.7 ml)
0.00350	0.00350	4.70	9.40	14.10	18.80	1.55 (45.9 ml)
0.00175	0.00175	2.35	4.70	7.05	9.40	0.78 (22.9 ml)
0.00100	0.00100	1.34	2.69	4.03	5.37	0.44 (13.1 ml)

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
Caution: Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or the toilet. Prolonged or repeated skin contact may cause allergic reactions in some individuals. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS
 This product is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated sites may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash waters. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

PHYSICAL AND CHEMICAL HAZARDS
 Do not use, pour, spill or store near heat or open flame.

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

STORAGE AND DISPOSAL
 Do not contaminate water, food or feed by storage or disposal.
Storage: Store product in its original container in a cool, dry, locked place designated for such insecticides and out of the reach of children. Do not expose to extreme temperatures. In case of spillage, soak up with absorbent material such as sawdust, or fullers earth; sweep up and place in a labeled container and dispose of as follows.
Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

1 to 1 DILUTION RATES FOR Evolver 4-4 ULV						
MIX 1 PART Evolver 4-4 ULV WITH 1 PART OF A SUITABLE MINERAL OIL. APPLY AS FOLLOWS:						
Pounds A.I. per Acre		Application Rates				Fluid Ounces and (milliliters) Finished Spray Per acre
		Fluid Ounces per Minute at Vehicle Speeds				
Permethrin	PBO	5 mph	10 mph	15 mph	20 mph	
0.00700	0.00700	19.80	37.60	56.40	75.20	6.20 (183.3)
0.00350	0.00350	9.40	18.80	28.20	39.57	3.10 (91.7)
0.00175	0.00175	4.70	9.40	14.10	18.80	1.55 (45.9)
0.00100	0.00100	2.70	5.37	8.06	10.74	0.90 (26.6)

HOW TO APPLY
 For proper ground application mount the fog applicator so that the nozzle is at least 4 1/2 feet above the ground level and directed out the back of the vehicle. May be applied at speeds of 5 mph. up to 20 mph. Failure to follow these label directions may result in reduced effectiveness. For Aerial Application refer to the “Aerial Application” section on this label. **Evolver 4-4 ULV** may be used as is, or diluted with a suitable solvent such as 60 to 100 Second viscosity mineral oil and applied at a rate not to exceed 3.10 fl. oz. of **Evolver 4-4 ULV** per acre. Both aerial and ground applications should be made when the wind is less than 10 mph. For exact rates, see the “Undiluted” or the “1 to 1 Dilution” rate charts on this label.

Evolver 4-4 ULV is recommended for application as an Ultra Low Volume (ULV) Thermal or Non-Thermal aerosol (cold fog) to control adult mosquitoes, and other insects as listed on this label, in residential and recreational areas where these insect pests become a problem; such as, but not limited to parks, campsites, woodlands, athletic fields, golf courses, residential areas, municipalities, gardens, playgrounds, and non-crop waste areas. Do not apply this product within 100 feet (30 meters) of lakes and streams. Do not allow spray or drift on pastureland, cropland, (except those crops listed) or potable water supplies. For best results, treat when mosquitoes or insects are most active and weather conditions are conducive to keeping the fog close to the ground (e.g. cool temperatures and wind speeds are not greater than 10 mph). Applications during the cool hours of night or early morning are usually preferable. Repeat treatment when recommended by Public Health Officials or Mosquito Abatement Districts.

Evoluer 4-4 ULV can be applied over specific growing crops and range grasses prior to harvest for the control of adult mosquitoes and biting flies within or adjacent to these areas. Application can only be made where the following crops are present:

Almonds	Leafy Vegetables
Apples	Lettuce
Broccoli	Mushrooms
Brussels sprouts	Onions, dry bulb
Cabbage	Peaches
Celery	Pears
Cauliflower	Peppers, bell
Cherries	Soybeans
Corn, fodder	Tomatoes
Corn, forage	Vegetables, cucurbit
Corn grain	Walnuts
Eggplant	
Range Grasses	

In treatment of corrals, feedlots, animal confinements/houses, swine lots and zoos, cover any exposed drinking water, drinking fountains and animal feed before application.

Do not apply this product within 100 feet (30 meters) of lakes and streams.

ULV NON-THERMAL AEROSOL (COLD FOG)

To control Mosquitoes, Midges and Black flies, apply **Evoluer 4-4 ULV** using any standard ULV ground applicator capable of producing a non-thermal aerosol fog with droplets ranging in size from 5 to 30 microns in diameter and a mass median diameter (MMD) of 15 to 20 microns (droplets should not exceed 50 microns and less than 5% of drops should be below 5 microns), with an application swath width of 300 feet. Silicon slides should be required for calibration. Droplet size of application may be determined using the following procedure: Droplet size should be sampled using Teflon coated glass slides. An adequate amount of air should be sampled by using, for example, rotating rod samplers. Other sampling techniques, such as AMES machine, may be used if authorized by local authorities. Slides are examined microscopically and the diameter of droplets measured in microns. Slides should be scanned until 100 to 200 droplets have been assessed. A spread factor of 0.61 should be used to correct droplet diameters. The largest droplet should not exceed 50 microns and less than 5% of the droplets should be below 5 microns. A 90% value of the droplets should be in the range of 5 to 30 microns in size.

When applying this product undiluted, apply at a flow rate of 2.69 to 18.80 ounces per minute at an average vehicle speed of 10 mph. These rates are equivalent to 0.001 to 0.007 pound of permethrin a.i. and 0.001 to 0.007 pound of piperonyl butoxide a.i. per acre. If a different vehicle speed is used, adjust the rate accordingly. Vary flow rates accordingly to vegetation density and mosquito population. Use higher flow rates in heavy vegetation or when insect populations are high. An accurate flow rate control system must be used to ensure proper flow rate. **Evoluer 4-4 ULV** may also be applied by diluting 1 part to 1 part of a 60 to 100 second mineral oil or another suitable solvent applies so as not to exceed the maximum a.i. rates per acre as shown in the rate charts. If an alternate dilution rate is required, adjust the flow rate accordingly, provided the droplet size and spectrum remain within the label specifications. Do not exceed a flow rate of 20 oz. per minute unless recommended by equipment manufacturers and/or Public Health Officials when undiluted or diluted 1 to 1, and high vehicle speeds of 10, 15 or 20 mph are necessary in emergency conditions, and when fogging equipment is capable of such higher rates of output per minute.

THERMAL AEROSOL FOGGING

TRUCK MOUNTED: Apply **Evoluer 4-4 ULV** diluted or undiluted with suitable Thermal Fogging equipment. Droplet size of thermal "fog" will range 0.1 to 1.0 micron. If diluted use a 60 to 100 second viscosity mineral oil, or another suitable non-phytotoxic diluent, to reduce oil requirement and sludge buildup in equipment. Do not exceed the maximum rates. May be applied at speeds of 5 mph up to 20 mph. **HAND CARRIED and/or LAWN MOWER FOGGERS,** use the same rates of a.i. per acre with a 50 foot swath width at a walking speed of 2 mph. Do not fog when wet foliage. Do not fog when wind conditions exceed 10 mph. Only use a clean, well maintained, and properly calibrated fogger, known to give excellent performance. Fog downwind. Apply **Evoluer 4-4 ULV** to deliver 0.001 to 0.007 pound of permethrin a.i. per acre and 0.001 to 0.007 pound of piperonyl butoxide a.i. per acre.

USE AS AN INSECT BARRIER TREATMENT

For use in Non-Thermal ULV, motorized, portable backpack fog type mist blower equipment, apply **Evoluer 4-4 ULV** with equipment adjusted to deliver ULV particles of 50 to 100 mass median diameter. **Evoluer 4-4 ULV** may be applied undiluted or diluted (see application rate charts on this label). If diluted, use a 30 to 100 second viscosity mineral oil, or another (if recommended by Public Health Officials) suitable non-phytotoxic diluent. Use 0.001 to 0.007 pound of permethrin a.i. per acre at a 50 ft. (15.2 m) swath width while walking at a speed of 2 mph (3.2 kph). Whether applied undiluted or diluted, or at a different speed, make sure that the same amount (0.001 to 0.007 lb.) of permethrin a.i. and piperonyl butoxide a.i. is applied per acre.

AERIAL APPLICATION

Aerial application with ULTRA LOW VOLUMES of **Evoluer 4-4 ULV** applied according to the rate charts on this label may be considered necessary when conducted at the discretion of Public Health Officials, Mosquito Abatement Districts, or other trained personnel engaged in outdoor Mosquito and flying insect control programs, when these insects threaten to become a public health hazard. Application should be made by suitable aerial ULV equipment capable of producing droplets with an MMD of 50 microns or less with no more than 2.5% exceeding 100 microns at an altitude of 120 to 175 feet depending on the terrain and weather conditions. The recommended airspeed for Fixed Wing aircraft with flat fan nozzles is from 120 to 160 mph. For Rotary Aircraft equipped with rotary nozzles, apply at a sufficient airspeed to deliver the appropriate amount of **Evoluer 4-4 ULV** a.i. per acre. Do not exceed 3.10 fluid ounces per acre of **Evoluer 4-4 ULV** which is equal to 0.007 lb. permethrin a.i. per acre and 0.007 lb. piperonyl butoxide a.i. per acre.

PROHIBITION FOR AERIAL USE: Not for aerial application in the State of Florida unless specifically authorized by the Bureau of Entomology and Pest Control, Florida Department of Agriculture and Consumer Services.

READ ENTIRE LABEL BEFORE USING

Read the entire **Directions for Use, Conditions, Disclaimer of Warranties, and Limitation of Liability** before using this product. By using this product, User and Buyer accept the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The Directions for Use of this product are believed to be adequate and should be followed carefully. However it is impossible to eliminate all risks associated with the use of this product. Injury, 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 **Value Garden Supply**. All such risks shall be assumed by the User or Buyer.

DISCLAIMER OF WARRANTIES: There are no warranties express or implied, of merchantability or of fitness for a particular purpose or otherwise, which extend beyond the statements made on this label. No agent of **Value Garden Supply** is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. **Value Garden Supply** disclaims any liability whatsoever for special, incidental, or consequential damages resulting from the use or handling of this product.

LIMITATION OF WARRANTIES: 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, or at **Value Garden Supply's** option, the replacement of the product.

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