

- For use in automatic spraying systems, in animal quarters, cattle barns, dairies, dairy and beef barns, milking parlors, poultry houses, swine housing, warehouses and residential backyards
- Polymeric Surfactant System—a formulation that allows convenient and stable dilution with water
- Will not harm most common ornamental plants
- Kills mosquitoes which may transmit West Nile Virus

**ACTIVE INGREDIENTS:**

* Permethrin [(3-Phenoxyphenyl) methyl (+ or -) cis-trans-3-(2,2-dichloroethenyl) 2,2-dimethylcyclopropanecarboxylate] .....	10.00%
** Piperonyl butoxide, Technical .....	10.00%
OTHER INGREDIENTS .....	80.00%
	100.00%

\* Cis-trans isomers ratio: Min. 35% (+ or -) cis and Max. 65% (+ or -) trans

\*\* Equivalent to 8.00% (butylcarbityl) (6-propylpiperonyl) ether and 2.00% related compounds

**Contains 0.856 lbs. of Permethrin per gallon**

KEEP OUT OF REACH OF CHILDREN

**CAUTION**

See back for first aid and precautionary statements.

**DIRECTIONS FOR USE**

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

READ ENTIRE LABEL BEFORE EACH USE.

Keep container sealed when not in use. Protect from freezing. To prepare dilutions, add the required amount of concentrate to water and blend thoroughly.

Not for forestry use or commercial nursery use.

Not for use on plants being grown for sale or other commercial use, or for commercial seed production or for research purposes.

For use outdoors and in homes and nonfood areas of commercial buildings, institutions, warehouses, theatres, office buildings, schools, motels, hotels, restaurants, food/feed processing establishments, hospitals, kennels, poultry houses, dairies, cattle barns, milking parlors, horse barns and swine houses.

**Dilution rates on this label will yield the following ready-to-use product:**

Rate	Ounces of concentrate per gallon	% Permethrin
1:19	6.40	0.500%
1:39	3.20	0.250%
1:100	1.28	0.100%
1:200	0.64	0.050%
1:400	0.32	0.025%

The number following the dilution directions on this label refers to the ready-to-use Permethrin level.

For maximum effectiveness, a combination of localized application and space treatment is recommended. Remove pets and birds and cover fish aquariums before spraying.

**FOR PET USE – USE ONLY ON DOGS**

**INDOOR USE AREAS**

Do not use in food areas of food handling establishments and restaurants or other areas where food is commercially prepared or processed. Do not use in serving areas while food is exposed or facility is in operation. Serving areas are areas where prepared foods are served such as dining rooms, but excluding areas where foods may be prepared or held. In the home, remove all exposed food and cooking utensils. Cover all food-processing surfaces or wash thoroughly after treatment and before use. Cover or remove exposed food.

NONFOOD/FEED AREAS include (but are not limited to) garbage rooms, lavatories, floor drains (to sewers), entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, garages, mop closets and storage (after canning or bottling):

Bakeries	Hospitals	Restaurants
Beverage plants	Hotels	Schools
Canneries	Industrial installations	Ship holds
Flour mills	Kennels	Supermarkets
Food processing plants	Meat packing plants	Truck trailers
Grain elevators	Motels	Warehouses
Granaries	Office buildings	
Homes	Railroad cars	

## Application method: Surface spray

Pests controlled	Use directions	Dilution rate
Cockroaches, Waterbugs, Palmetto Bugs, Ants, Silverfish, Firebrats, Spiders, Crickets, Millipedes, Centipedes, Sowbugs, Pillbugs, Clover Mites, Cheese Mites, Granary Weevils, Rice Weevils, Confused Flour Beetles, Rust Red Flour Beetles, Saw-toothed Grain Beetles, Spider Beetles, Cigarette Beetles, Drug Store Beetles, Darkling Beetles, Mealworms, Grain Mites, Caddises, and Lesser Houseflies and other manure breeding flies	Use a sprayer adjusted to deliver a coarse wet spray. Direct the spray into hiding places, cracks and crevices, under pallets, around containers of stored foods, around the base of machinery and behind shelves and drawers. Spray bookcases for Silverfish. Spray ant trails, nests and points of entry. If surface application only is to be used, spray floors, walls and other surfaces applying at a rate of 1 gallon to 750 square feet of surface.	For initial clean up of severe insect infestation, dilute at a rate of 1 part concentrate in 19 parts water (6.4 fluid ounces per gallon) (0.5%).  For normal infestations, dilute 1 part concentrate in 39 parts water (3.2 ounces per gallon) (0.25%).
Centipedes, Ground Beetles, Pillbugs, Sowbugs, Scorpions and Ticks	Apply around doors and windows and other places where these pests may enter premises. Treat baseboards, storage areas and other locations where these pests are found.	For maintenance use, dilute 1 part concentrate in 100 parts water (1.28 ounces per gallon) (8 teaspoonfuls per gallon) (0.1%).
Carpet Beetles	Spray edges of carpeting and under carpeting and rugs. Make localized application to floor and baseboards. Spray directly into cracks, closets and infested areas of shelving.	
Flying Insect Resting Places (aids in the control of Mosquitoes, Gnats, Skippers, Boxelder Bugs, Multi-colored Asian Lady Beetles)	Treat walls, ceilings, moldings, screens, door frames, window frames, beams, light cords, and similar resting places.	Dilute at a rate of 1 part concentrate in 19 parts water (6.4 fluid ounces per gallon) (0.5%).
Clothes Moths	Remove infested articles from storage, brush thoroughly and air for several hours in sunlight, if possible. Apply spray liberally to empty chests, closets, bureaus and other storages directing the spray into cracks, joints and crevices. After airing, infested articles may be treated lightly, keeping nozzle at least three feet from fabric to avoid staining.	For initial clean up of severe insect infestation, dilute at a rate of 1 part concentrate in 19 parts water (6.4 fluid ounces per gallon) (0.5%).
Bed Bugs	Spray mattresses lightly, particularly around tufts and seams. Take beds apart and spray in all joints. Treat baseboards, moldings, and floors. Allow all treated articles to thoroughly dry before use.	For normal infestations, dilute 1 part concentrate in 39 parts water (3.2 ounces per gallon) (0.25%).
Lice and Louse Eggs	Spray in an inconspicuous area prior to use to test for possible staining or discoloration. Inspect again after drying. Spray from a distance of 8 to 10 inches. Treat only those garments and parts of bedding, including mattresses and furniture that cannot be either laundered or dry-cleaned. Allow all treated articles to dry thoroughly before use.	For maintenance use, dilute 1 part concentrate in 100 parts water (1.28 ounces per gallon) (8 teaspoonfuls per gallon) (0.1%).
Fleas, Flies, Ticks, Lice and Mange Mites (adults and larvae) in kennels, doghouses, runs and yards	Test delicate fabrics in an inconspicuous area prior to use. Thoroughly spray infested areas, pet beds, resting quarters, nearby cracks and crevices, along and behind baseboards, moldings, window and door frames and localized areas of floor and floor coverings (rugs and carpets). Fresh bedding should be placed in animal quarters once spray has dried. Adult fleas and larvae contacted by spray will be killed.	

## Application method: Space spray

Pests controlled	Use directions	Dilution rate
House Flies, Fruit Flies, Gnats, Mosquitoes, Skipper Flies, Wasps, Hornets, Bees, Black Flies, Multi-colored Asian Lady Beetles, Boxelder Bugs, Angoumois Grain Moths, and Tobacco Moths	Apply with mechanical or compressed air equipment (non-thermal) adjusted to deliver a fine mist. Close doors and windows and shut off ventilating systems. Direct spray at an upward angle distributing it uniformly through the entire area at a rate of 1 ounce per 1,000 cubic feet of space. Keep area closed for at least 10 minutes. Vacate areas after treatment and ventilate and sweep up dead insects before occupying.  For rapid kill of exposed or accessible stages of other insects named on this label. Apply using conventional mechanical or compressed air equipment (non-thermal), following directions for space spraying. Apply dilutions at a rate of 1 ounce per 1,000 cubic feet of space.	For initial clean up of severe insect infestation, dilute at a rate of 1 part concentrate in 19 parts water (6.4 fluid ounces per gallon) (0.5%).  For normal infestations, dilute 1 part concentrate in 39 parts water (3.2 ounces per gallon) (0.25%).  For maintenance use, dilute 1 part concentrate in 100 parts water (1.28 ounces per gallon) (8 teaspoonfuls per gallon) (0.1%).

## OUTDOOR USE AREAS

Including Corrals, Drive-In Theaters, Drive-In Restaurants, Feed Lots, Gardens, Homes, Parks, Golf Courses, Playgrounds, Recreational Areas, Swine Lots, Urban Areas, Zoos.

## Application method: Premise spray

Pests controlled	Use directions	Dilution rate
Mosquitoes, Wasps, Gnats, Annoyance Flies and Skippers	Treat walls, ceilings, moldings, screens, doorframes, window frames, beams, light cords and similar resting places. Application should be made prior to occupancy. Cover any exposed water, drinking fountains and animal feed before application. In zoos, prevent exposure of reptiles to the product.	Dilute 1 part concentrate in 40 parts water (3.2 fluid ounces per gallon of water) (0.25%).
Gypsy Moth Caterpillars and Adults, Adult Japanese Beetles, Eastern and Forest Tent Caterpillars, Mole Crickets and Grasshoppers	Apply to insure thorough coverage of upper and lower surfaces. Thoroughly wet down grass a few hours before applying. Home lawns should be not taller than 3 inches at time of application. Irrigate with 1/4 inch of water immediately after application. For heavy infestations, repeat application after 2 weeks.  Treat trees and shrubs as soon as insects emerge (usually late spring). Treat leaves, branches, and tree trunks evenly, making sure to penetrate dense foliage. Repeat application every 7 days as necessary for control.  On roses and in flower gardens: Treat plants and flowers as soon as insects appear. Spray plants and flowers making sure to penetrate dense foliage. Repeat application every 7 days or as necessary for control.	Dilute 1 part concentrate in 40 parts water (3.2 fluid ounces per gallon of water) (0.25%).  Mix 1.28 fl. oz. per gallon of water and treat 1,000 sq. ft. Slightly more water may be used as long as the amount of product per area is the same.
Fire Ants	Apply at the rate of one gallon per mound as a gentle rain from a typical garden sprinkling can. Thoroughly wet the mound and surrounding area to a diameter of 4 feet. For best results, apply in cool weather, 65° to 80°F, or in early morning or late evening hours. Treat new mounds as they appear. Do not disturb the mound prior to treatment. Treat all mounds in the vicinity and treat all colonies, which have not yet constructed mounds. Do not use equipment that produces a pressurized spray since this will disturb Fire Ants and cause migration, reducing product effectiveness.	Mix 6.4 fl. oz. in 1 gallon of water.

(chart continued on next page)

## Application method: Premise spray (continued)

Pests controlled	Use directions	Dilution rate
Ants, Crickets, Earwigs, Fleas and Ticks	For localized infestations of these insects in areas where there are weeds or bushy non-crop areas, spray infested areas thoroughly. For Ants, thoroughly wet hills and runways.	For severe infestation, dilute 1 part concentrate in 19 parts water (6.4 oz. per gallon of water) (0.5%) and treat 400 linear feet with a 6-inch spray band. For normal infestations, dilute 1 part concentrate in 39 parts water (3.2 oz. per gallon) (0.25%).
Clover Mites, Millipedes, Sowbugs (Pillbugs)	To help prevent infestation of buildings, treat the building foundation to a height of 2 to 3 feet where pests are active and may find entrance. Also, apply as a residual spray to outside surfaces of buildings, patios, garages, and other areas where these pests may be found.	
Armyworms, Cutworms, Chinch Bugs, Sod Webworms	Thoroughly wet down grass a few hours before applying. Home lawns should be no taller than 3 inches at time of application. Delay watering or mowing for 24 hours after treatment. For heavy infestation, repeat application after 2 weeks.	Mix 3.2 fl. oz. per gallon of water and treat 1,000 sq. ft. Slightly more water may be used as long as the amount of product per area is the same.

## ANIMALS AND ANIMAL PREMISE USE AREAS

including Cattle Barns, Swine Houses, Milk Rooms, Poultry Houses, Horse Barns, Kennels, Dairies, Milking Parlors.

For use on Dairy and Beef Cattle, Sheep, Goats, Swine, Horses, Poultry and Dogs:

Pests controlled	Use directions	Dilution rate
Horn Flies, House Flies, Mosquitoes and Gnats	Apply to wet the hair thoroughly, with particular attention to topline, underline, flanks, withers and other infested areas. Repeat treatment at intervals of 5 to 12 days for small insect populations or as needed when flies are emerging in large numbers.	
Stable Flies, Horse Flies and Deer Flies	Apply a quart per adult animal to wet the hair thoroughly with particular attention to the legs, flanks, barrel, topline and other body areas commonly attacked by those flies. Repeat daily as needed.	For clean up of severe insect infestation, dilute at a rate of 1 part concentrate in 100 parts water (1.28 ounces per gallon) (8 teaspoonfuls per gallon) (0.1%).
Face Flies	Apply using spray that produces large wetting droplets. Apply to the face of the animal in the morning before releasing to pasture. Apply sufficiently to wet the face, but not more than 1 1/2 ounces per animal. Repeat daily as needed.	For normal infestations, dilute 1 part concentrate in 200 parts water (0.64 ounces per gallon) (4 teaspoonfuls per gallon) (0.05%).
Poultry Lice	Spray roosts, walls and nests or cages thoroughly, followed by spraying over the birds with a fine mist.	For maintenance use, dilute 1 part concentrate in 400 parts water (0.32 ounce per gallon) (2 teaspoonfuls per gallon) (0.025%).
Bed Bugs and Mites (including Northern fowl mite) in poultry houses	Spray crevices of roost poles, cracks in walls and cracks in nests where the Bed Bugs and Mites hide. Spray birds with a fine mist paying particular attention to vents. Use at the rate of 1 gallon of spray per 100 birds.	
Sheep "Tick" or Ked	Thoroughly wet all portions of the body by dipping or spraying with sufficient pressure and with a nozzle adjustment to give penetration of the wool. Treat at a rate sufficient to wet the animal.	
Meal Worms, Darkling Beetles	Apply as a fog or fine mist, directing the spray toward the ceiling and upper corners until the area is filled with mist. Use about 2 ounces per 1,000 cubic feet of space. For best results, close doors and windows before spraying and keep closed for 10 to 15 minutes. Vacate the treated area and ventilate before reoccupying.	
Horn Flies, Face Flies, Horseflies, Ear Ticks	Back rubber—keep back rubber charged. Results can be improved by forced use.	Dilute 8 oz. in 5 gallons oil.
Blowflies, Hog Lice, Ticks (including deer ticks, carrier of Lyme disease)	Spray, dip, or sponge to apply 1 pint per pig, especially around ears.	Dilute 1.28 oz. per gallon of water (1 part concentrate to 100 parts water) (0.10%).
Poultry Mites, Northern Fowl Mites and Lice	Spray at the rate of 1 gallon per 100 birds, with a fine mist. Spray roosts, walls and nests or cages.	
Fleas, Ticks, Lice and Mange Mites (adults and larvae on dogs and livestock)	Thoroughly wet the animal by dipping, sponging or spraying. Allow animal to dry in a warm place without rinsing or toweling. Gives long lasting protection against reinfestation. Repeat applications at intervals of 2 to 3 weeks. <b>Do not treat puppies less than twelve weeks old.</b> Sensitivities may occur after using ANY pesticide product for pets. If signs of sensitivity occur bathe your pet with mild soap and rinse with large amounts of water. If signs continue, consult a veterinarian immediately. Consult a veterinarian before using this product on debilitated, aged, medicated, pregnant or nursing animals.	For clean up of severe insect infestation, dilute at a rate of 1 part concentrate in 100 parts water (1.28 ounces per gallon) (8 teaspoonfuls per gallon) (0.1%). For normal infestations, dilute 1 part concentrate in 200 parts water (0.64 ounces per gallon) (4 teaspoonfuls per gallon) (0.05%). For maintenance use, dilute 1 part concentrate in 400 parts water (0.32 ounce per gallon) (2 teaspoonfuls per gallon) (0.025%).
Fleas, Flies, Ticks, Lice and Mange Mites (adults and larvae) in kennels, doghouses, runs and yards	Test delicate fabrics in an inconspicuous area prior to use. Thoroughly spray infested areas, pet beds, resting quarters, nearby cracks and crevices, along and behind baseboards, moldings, window and doorframes and localized areas of floor and floor coverings (rugs and carpets). Fresh bedding should be placed in animal quarters once spray has dried. Adult fleas and larvae contacted by spray will be killed.	For initial clean up of severe insect infestation, dilute at a rate of 1 part concentrate in 19 parts water (6.4 fluid ounces per gallon) (0.5%). For normal infestations, dilute 1 part concentrate in 39 parts water (3.2 ounces per gallon) (0.25%). For maintenance use, dilute 1 part concentrate in 100 parts water (1.28 ounces per gallon) (8 teaspoonfuls per gallon) (0.1%).

FOR DAIRY CATTLE: Spray lactating dairy cows only after milking is complete.

FOR SWINE: Do not ship animals for slaughter within 5 days of last treatment.

### DIRECTIONS FOR USE IN AUTOMATIC MISTING AND ULV SPRAYING SYSTEMS:

In areas such as animal quarters, dairy and beef barns, poultry houses, swine housing, warehouses, zoos and other listed livestock or animal housing areas.

To kill Flies, House Flies, Horn Flies, Stable Flies, Deer Flies, Horse Flies, Mosquitoes, including the Culex species that may carry and transmit the West Nile Virus, Gnats, Hornets, Wasps, Yellow Jackets, Fire Brats, Small Flying Moths, Earwigs, Fleas, Ticks, Crickets, Cockroaches, Silverfish, Spiders and other listed insects: Mix 1/2 gallon (64 fluid ounces) of concentrate in 55 gallons of water to yield a solution of 0.09% Permethrin and 0.09% Piperonyl Butoxide. For high populations of insects or when treating species that are

difficult to control, mix up to 1 gallon of concentrate in 55 gallons of water to yield a solution of 0.18% Permethrin and 0.18% Piperonyl Butoxide. When filling tank, partially fill the system reservoir tank with water, add concentrate to tank, then add water to obtain desired dilution.

System nozzles should deliver fine particle size droplets (aerosol or mist). Nozzles should be rated for a delivery rate not to exceed 1.25 fluid ounces of solution per minute, with one nozzle covering 100 square feet. Set system timer to operate in accordance with equipment directions. Automatic spraying systems must not be designed and programmed to release pesticides where feed is directly exposed to spray mist.

Personnel should vacate containment treatment areas while treatment is in progress. Treated areas should be thoroughly ventilated prior to re-entry by personnel. Do not use in commercial food/feed handling establishments, restaurants, or other areas where food is commercially prepared or processed.

## DIRECTIONS FOR USE IN OUTDOOR RESIDENTIAL MISTING SYSTEMS:

**NOTE: NOT REGISTERED for use in Automatic ULV Spraying Systems in the State of New York.**

Use to control or temporarily reduce annoyance from accessible stages of: Mosquitoes including the Culex species that may carry and transmit the West Nile Virus, Flies, House Flies, Gnats, Deer Flies, Horse Flies, Hornets, Wasps, Yellow Jackets, Fire Brats, Small Flying Moths, Earwigs, Fleas, Ticks, Crickets, Cockroaches, Silverfish, Spiders and other nuisance insects.

Residential misting system installers and service technicians must comply with the license, certification, or registration requirements of the state(s), tribe(s), or local authority(ies) where they are installed.

Do not apply this pesticide when people, pets and food are present.

Do not use in an evaporative cooling system.

If used in a system with a reservoir tank for the end use dilution, the system reservoir tank must be locked. Securely attach the end use pesticide label and a dilution statement to the system reservoir tank in a weather protected area or plastic sleeve. The dilution statement must be phrased as follows: This container holds \_\_\_ parts Sector™ Misting Concentrate to \_\_\_ parts water.

If used in a direct injection system, the pesticide container must be locked. Securely attach the end use label to the pesticide container in a weather protected area or plastic sleeve.

Only use this product in residential misting systems that have been calibrated to apply no more than the maximum application rate of 9.5 fl. oz. of 0.09% synergized permethrin solution per 1,000 cubic feet per day.

Mix 1/2 gallon (64 fluid ounces) of concentrate in 55 gallons of water to yield a solution of 0.09% Permethrin and 0.09% Piperonyl Butoxide. For high populations of insects or when treating species that are difficult to control, mix up to 1 gallon of concentrate in 55 gallons of water to yield a solution of 0.18% Permethrin and 0.18% Piperonyl Butoxide. When filling tank, partially fill the system reservoir tank with water, add concentrate to tank, then add water to obtain desired dilution.

System nozzles should deliver fine particle size droplets (aerosol or mist). Direct nozzles to spray towards the target area and away from swimming pools, water bodies, or eating and cooking areas. Set system timer to operate in accordance with equipment directions.

### Automatic spraying system dilution table

A System tank size (in gallons)	B Conversion factor (fluid ounces of concentrate per gallon of water)	A x B = Fluid ounces of concentrate for that tank size, to be mixed with water to achieve 0.09% synergized permethrin solution
1	1.16	1.16
15	1.16	17
20	1.16	23
30	1.16	35
55	1.16	64

**When refilling a partially filled tank:** calculate the amount of additional solution (in gallons) required to fill the tank to the desired level. Multiply the number of gallons required to refill tank times 1.16 to determine the amount of this concentrate to add when refilling (to achieve 0.09% synergized permethrin solution).



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## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store upright at room temperature. Avoid exposure to extreme temperatures.

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

**CONTAINER DISPOSAL: If empty:** Do not reuse this container. Place in trash or offer for recycling if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

KEEP OUT OF REACH OF CHILDREN

## CAUTION

### FIRST AID

#### IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Do not give **any** liquid to the person.
- Do not give anything by mouth to an unconscious person.

#### IF ON SKIN OR CLOTHING:

- 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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information regarding medical emergencies or pesticide incidents, call 1-888-740-8712.

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## CAUTION

Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

#### ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and other aquatic organisms. For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. 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 OR CHEMICAL HAZARDS

Do not use this product in or on electrical equipment due to possibility of shock hazard.