

# **BACKPACK SPRAYER ULV APPLICATION**

## General Information

### APPLICATION INSTRUCTIONS

Apply at a rate not to exceed 0.007 pounds of permethrin per acre in any given 24 hour period. Do not retreat a site more than once in 3 days. Do not exceed 25 applications at 0.007 pounds of permethrin per acre (not to exceed a total of 0.18 pounds of permethrin per acre) in any given season. More frequent applications may be made to prevent or control a threat to public and/or animal health determined by a state, tribal or local health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

Do not make applications during rain. Not for use in metered release systems.

Not for use in outdoor residential misting systems.

AQUA-RESLIN is approved for application as an Ultra-Low Volume (ULV) aerosol to control adult mosquitoes and flies in residential, industrial, urban, recreational, and other areas where adult mosquitoes and flies are found. The formulation greatly reduces the evaporation rate of water from the droplets and allows the water-based spray cloud to behave as that produced by a typical oil-based formulation. AQUA-RESLIN is also approved for application with mist-blowers, backpack sprayers, handheld sprayers, and low pressure hand sprayers for barrier or surface applications. AQUA-RESLIN is used for control of annoyance flies and mosquitoes, mosquitoes and flies of public health or disease vector importance in areas such as but not limited to residential areas, industrial areas, urban areas, parks, campsites, woodlands, athletic fields, golf courses, playgrounds, recreational and overgrown waste areas, roadsides, and other areas where adult mosquitoes and flies occur. Apply at a rate not to exceed 0.007 pounds of permethrin per acre in any given 24 hour period. Do not retreat site more than once in 3 days. Do not exceed 25 applications at 0.007 pounds of permethrin per acre (not to exceed a total of 0.18 pounds of permethrin per acre) in any given season. More frequent applications may be made to prevent or control a threat to public and/or animal health determined by a state, tribal or local health or vector control agency on the basis of

documented evidence of disease causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

This product can be applied to the air column over specific growing crops prior to harvest and range grasses for the control of adult mosquitoes and biting flies within or adjacent to these areas. Application can be made where the following crops are present:

Alfalfa, Almonds, Apples, Artichoke, Asparagus, Avocado, Broccoli, Brussel sprouts, Cabbage, Cantaloupe, Cauliflower, Celery, Cherry, Corn (field and pop), Corn (sweet), Eggplant, Filberts (Hazelnuts), Garlic, Horseradish, Lettuce, Onions (dry bulb only), Papayas (FL only), Peaches / Nectarines, Pears, Bell peppers, Pistachios, Potatoes, Soybeans, Spinach, Tomatoes, and Walnuts.

Cucurbit vegetables, including: Chayote (fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cuban pumpkin, Cucumber, Gherkin, Gourd (edible, includes hyotan, cucuzza, hechima, Chinese okra), Momordica spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of Cucumis melo including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon and Winter melon), Pumpkin, Squash (includes Summer squash types such as: butternut squash, calabaza, crookneck squash, Hubbard squash, scallop squash, straightneck squash, vegetable marrow and zucchini, and winter squash types such as acorn squash and spaghetti squash), Watermelon (includes hybrids and/or varieties of Citrullus lanatus).

Leafy Vegetables, including: Leafy vegetables (except brassica); Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Chervil, Chrysanthemum (edible leaved and garland), Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Spinach (including New Zealand and vine (Malabar spinach, Indian spinach)).

In the treatment of corrals, feed lots, swine lots, poultry ranges, and zoos cover any exposed drinking water, drinking fountains and animal feed before application.

AQUA-RESLIN provides effective control of adult mosquitoes, black flies, gnats,

biting and nonbiting midges, stable flies, horse flies, deer flies, sheep flies, horn flies, and nuisance flying insects such as houseflies.

### Spray Droplet Size Determination

#### Ground Equipment:

Spray equipment must be adjusted so that the volume median diameter is less than 30 microns ( $Dv\ 0.5 < 30\ \mu\text{m}$ ) and that 90% of the spray is contained in droplets smaller than 50 microns ( $Dv\ 0.9 < 50\ \mu\text{m}$ ). Directions from the equipment manufacturer or vendor, pesticide registrant, or a test facility using a laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

#### Aerial Application made at $\leq 200$ feet above ground elevation:

Spray equipment must be adjusted so that the volume median diameter produced is less than 60 microns ( $Dv\ 0.5 < 60\ \mu\text{m}$ ) and that 90% of the spray is contained in droplets smaller than 100 microns ( $Dv\ 0.9 < 100\ \mu\text{m}$ ). The effects of flight speed and, for non-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant, or a test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated. Apply when wind speed is equal to or greater than 1 mph.

#### Aerial Application made at $>200$ feet above ground elevation:

Spray equipment must be adjusted so that the volume median diameter produced is less than 70 microns ( $Dv\ 0.5 < 70\ \mu\text{m}$ ) and that 90% of the spray is contained in droplets smaller than 145 microns ( $Dv\ 0.9 < 145\ \mu\text{m}$ ). The effects of flight speed and, for non-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant, or a test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated. All types of applications should be conducted at temperatures above 50°F. Apply when wind speeds are equal to or greater than 1 mph.

## Limitations, Restrictions, and Exceptions

BACKPACK SPRAYER ULV APPLICATION: Apply through non-thermal ULV application equipment and base acreage calculations on a 50 foot swath. Dilute AQUA-RESLIN with water and apply at the rate of 8 ounces of finished spray per acre (based on a 50 foot swath, 8 ounces should be applied while walking 870 feet). To apply 0.0035 pounds of permethrin per acre, dilute 1 part AQUA-RESLIN with 31 parts water and apply at the rate listed above. To apply 0.007 pounds of permethrin per acre, dilute 1 part AQUA-RESLIN with 15 parts of water and apply at the rate listed above.

Method

[Backpack spray](#)

Timings

[N.A.](#)