

# **ADULT MOSQUITO CONTROL - ULTRA LOW VOLUME (ULV) AERIAL APPLICATION**

General Information

## **DIRECTIONS FOR USE**

TRUMPET EC is a special formulation for use undiluted to be applied for the control of mosquitoes, flies and certain other nuisance insects.

## **APPLICATION RESTRICTIONS**

For application by, or under the supervision of, personnel certified/trained in public health pest control or mosquito control. For each application, a record must be kept of:

- Date, time and areas where application occurred
- Type and size of spray nozzle used
- Dilution and application rate
- Speed of application vehicle (whether air or ground)
- A description of insecticide delivery system used for the specific application
- Climate factors (e.g., ambient temperature, wind speed/direction) as determined using reliable means
- Employees involved in mixing, loading and applying TRUMPET EC

These records must be kept by the responsible public agency or their designee for a minimum of two years using storage methods that will allow the records to be easily retrieved.

Any system used to apply this product must be capable of providing the correct droplet size as specified below. Likewise, all applications must use the correct droplet size as specified below. Careful attention to directions concerning nozzles, nozzle positioning, air speed and droplet size is essential to avoid unwanted effects. Underatomization produces large droplets that will quickly fall to the ground, while

over-atomization produces finer droplets which either evaporate, dissipate, or drift in an unanticipated manner. Correct droplet size is critical to ensure effective mosquito control.

The entire spray system must be inspected before each operation to correct any leaks or obstructions, to detect whether the nozzle, hoses, or other parts are worn and need replacement, to ensure that the flow is properly calibrated and to determine that adequate pressure is being maintained. Adequate cleaning and maintenance of unit must be performed to ensure that the entire system is operating properly. Spray system components essential for correct droplet size must be cleaned or replaced as needed to ensure correct droplet size.

Spray during periods when ground level wind speed is equal to or greater than 1 mph. Apply when thermal activity is low. Do not apply when ambient temperature is less than 50°F.

Do not apply when it is raining in the treatment area.

Treatment of a site must be based on pest surveillance results. Do not treat any site more than 1 time per day. Do not treat any site with more than 2 fl. oz. of undiluted TRUMPET EC per acre within a 7 day period and the amount of undiluted TRUMPET EC applied to any site should not exceed 127 fl. oz. (10.73 pounds per acre of naled a.i./acre) per year. More frequent treatments 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.

Ground-Based Application:

Spray equipment must be adjusted so that the volume median diameter (VMD) is less than 40 microns ( $Dv\ 0.5 < 40\ \mu\text{m}$ ) and that 90% of the spray is contained in droplets smaller than 75 microns ( $Dv\ 0.9 < 75\ \mu\text{m}$ ). 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:

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 115 microns ( $Dv\ 0.9 < 115\ \mu\text{m}$ ). 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.

## OPERATIONAL USE INSTRUCTIONS

- All equipment used in the mixing or application (by ground or air) of TRUMPET EC must be constructed of corrosion-resistant materials. Stainless steel, bronze, brass, fiberglass, polypropylene and rigid PVC have all proven to be adequately resistant to the effects of TRUMPET EC when properly maintained and inspected.
- Use of Teflon or Viton seals is recommended. Even when these materials are used to construct a spray system, a careful maintenance program involving flushing, cleansing and constant inspection must be followed. Avoid use of steel or galvanized steel.
- Strain TRUMPET EC as it is being loaded. Use a 100 mesh stainless steel or nylon screen. If product crystallization occurs, warm at 70°F until crystals disappear.
- Flushing the system following application is required. Use water to thoroughly flush the entire spray system following application of TRUMPET EC.
- TRUMPET EC must be applied using the correct droplet size. Over-atomization produces finer droplets which either evaporate or dissipate too quickly and become unavailable for mosquito contact. The spread factor for TRUMPET EC on silicone or Teflon-coated slides is 0.54 and 0.7, respectively. If applied incorrectly, TRUMPET EC will spot certain automobile paint finishes. Careful attention to recommendations concerning nozzles, nozzle positioning, air speed and droplet size is essential to avoid paint spotting.

## Limitations, Restrictions, and Exceptions

## ADULT MOSQUITO CONTROL

Adult Mosquito Control in Residential Areas, Municipalities, Tidal Marshes, Swamps, Woodlands, and Agricultural Areas (when applied in wide-area public pest control programs sponsored by governmental entities): It is not necessary to avoid farm buildings, dairy barns, pastures, feed or forage areas. Use in agricultural areas must be in a manner as to ensure that residues do not exceed the established federal tolerance for the active ingredient in or on raw agricultural commodities resulting from use for wide area pest control. Treat shrubbery and vegetation where mosquitoes may be present. Shrubby and vegetation around stagnant pools, marshy areas, swamps, residential areas, municipalities, woodlands, pastures, farm buildings and feedlots may be treated.

Ultra Low Volume (ULV) Aerial Application: Apply 0.6 to 1.2 fl. oz. of undiluted product per acre (equivalent to 0.05 to 0.1 lb. a.i./acre). Use the 1.2 fl. oz. rate where heavy vegetation exists; i.e., woodlands, etc.

Vehicles used to apply TRUMPET EC must be kept closed during application (air-conditioned) and equipped with an automatic flow control device. Consult equipment manufacturers for specific recommendations.

Method

[Broadcast/Foliar Air](#)

Rates

[field rates 0](#)

[field rates 1](#)

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Timings

[N.A.](#)