

Fogging Protocol

Introduction

Fogging has distinct advantages when it comes to quickly eliminating existing insect populations, treating obstructed spaces (such as warehouses) and delivery of active ingredients in situations where achieving good coverage is essential. Fogging is a means to deliver insecticides, fungicides, disinfectants and deodorizers quickly and effectively. The purpose of this protocol is to give the user tips on proper fogging inspection, pre-treatment, treatment and post-treatment.

There are 3 common types of Foggers:

Thermal Foggers – Units use heat to vaporize liquid, producing a highly visible fog with very small droplet size. This type of fogger creates the smallest droplet size – from 0.2 to 10 microns.

Cold Foggers (ULV) – These units generate fog by a mechanical action that breaks down the liquid while combining it with high volume of air at low pressure. Users can calibrate the unit to produce droplets of the optimum size for the situation or product being used. Since products are delivered in concentrated form, a diluent is usually not needed. Most units produce droplet sizes in the range of 1 to 30 microns. The most effective droplet size is 5 to 15 microns, at this size droplets remain airborne for 2 to 6 hours.

Mist Generators – Utilize high-pressure air to force liquid through a small nozzle, producing a mist. This type of unit is well suited for delivering active ingredients deep into inaccessible or difficult to reach areas such as wall voids, ceilings floors, cabinets, or equipment.

Inspection

- Inspect the building for harborage and breeding areas and other conducive breeding sites.
- List all harborage sites and types of arthropods found during the inspection.
- Determine what obstacles exist and the appropriate steps to take to ensure a safe and effective treatment (unmovable obstructions, food and food surfaces, and hours of operation etc...)

Pre- Treatment

- When using oil based products, turn off pilot lights, ventilation fans and blowers and cover aquariums, green plants when using oil based products.
 - If treating a potentially hazardous area (flour mill) do not use a gas engine.
 - Electric motors must be explosion-proof.
- Store, cover, or remove food, food handling surfaces and utensils.
- Close and lock building doors and windows.
- Calibrate fogger to deliver optimum particle size and delivery rate for the situation, arthropod, and product being used.
- Calculate the volume of area to be treated (Length x Width x Height).
- Based on the delivery rate and volume of space to be treated, calculate the estimated time to treat the site, and “choreograph” or plan your application accordingly. This will help avoid over-application in one area, and under application in another area.
- The choreographed treatment plan and route should move from the center out towards the exits of the building. When treating individual rooms, treat and close doors when finished and move toward the exits of the building.
- Remove or cover all food items and surface areas whenever possible.
- Open cabinet doors and drawers where target pest are infesting.
- Consider adding an IGR (Insect Growth Regulator) to reduce the re-infestation from eggs and other immature stages.
- Consider one of the new water-based fogging concentrates avoid the hassles associated with oil-based products. Water-based products are non-flammable, so you don't have to shut off pilot lights or other ignition sources. Because there are no oily residues, growing plants do not need to be removed from the site being fogged, and there is no oily residue to clean up.
- Read and follow label directions for any product being used. Pay particular attention to the personal safety equipment for the applicator, and follow the instructions regarding vacating the site, and post-treatment ventilation (respirators, long sleeves, glove etc..).

Treatment

- Prior to general space treatment, treat wall voids and other inaccessible areas prior to fogging. Consider adding an IGR or residual insecticide in these areas.
- Prior to general space treatment, direct fog into corners, under and between pallets, racking and stored products. This will force insects out of harborage areas, making the space treatment more effective
- Treat entire structure directing the fog high and low.
- Follow the general fogging treatment with crack and crevice treatment with a residual insecticide and IGR mixture. Remember to replace any bait treatments following a fogging treatment.

Post-treatment

- Read the label. Make sure you allow the appropriate amount of time for ventilation and be aware of the appropriate re-entry time.
- Open doors and windows.
- Re-inspect in about 2 weeks.

Fogging Concentrates Quick Reference

	Space & Surface	Food Processing	Flies, Store Product Pest & Roaches	Synergized Pyrethrins	Synergized Pyrethroid	Oil Based	Water Based	Clean Out	Contains IGR
AltoCIRRUS	x	x	x		x	x			
Pyrocide100	x	x	x	x		x			
JETSTREAM	x	x	x	x			x		
CIRRUS	x	x	x		x	x		x	
Pyrocide300	x	x	x	x		x		x	
SHOCKWAVE	x	x	x	x	x	x		x	x