

## What chemicals are used?

### Pyrethrin

Pyrethrum is a botanical insecticide produced primarily from the flowers of *Tanacetum cinerariaefolium*, which is a species of the chrysanthemum plant family. It is found mainly in tiny oil-containing glands on the surface of the seed case in the tightly packed flower head and is the plant's own insecticide that has evolved to keep insects away. Pyrethrum is made up of six complex chemical esters known as pyrethrins which work in combination to repel and kill insects.

Pyrethrin has been used effectively to control insects for decades. It decomposes rapidly in the environment, making it an excellent choice for controlling pests.

Pyrethrin has been extensively studied from a toxicology viewpoint. It is low in acute toxicity to humans and other vertebrate animals, is non-carcinogenic and causes no adverse reproductive affects.

Pyrethrin is commonly used as a post harvest treatment for fruits and vegetables especially during shipment and is popular as a non-residual household insecticide spray.

### Permethrin

Permethrin is a broad spectrum synthetic pyrethroid insecticide. Permethrin has been around since the 1970's and is widely used today in public health, home pest control, forestry, agriculture and head lice control.

In the U.S. over 100 million applications of permethrin are made each year in homes and over 18 million applications are made in yards and gardens. Permethrin, like all synthetic pyrethroids, kills insects by strongly exciting their nervous systems.

### PBO (Piperonyl Butoxide)

PBO (Piperonyl Butoxide) is an emulsifiable synergist for use in combination with insecticides, especially synthetic pyrethroids, as a tank mix to overcome resistance that pests develop with constant use of insecticides.

PBO is a unique tank additive that restores activity against resistant strains of pests. It acts by inhibiting naturally occurring enzymes that would otherwise degrade the insecticide molecule.

# Auto Mist

## Insect Control System



## What is Auto Mist?

Auto Mist is an *automatic* insect control system installed in areas where insects are a nuisance. The Auto Mist system safely reduces contamination, infection, and insect transmitted diseases.



## How does the System Work?

The Auto Mist system includes nozzles, tubing, and a reservoir with a pressurized pump. Spray nozzles, connected by nylon tubing, are placed at strategic locations based on the structure of the facility to create a zone of protection. The nozzles and tubing are connected to a pressurized pumping system that is controlled by an automatic timer.

Once installed, the system is set to spray on a predetermined 24-hour schedule. The pump draws liquid from a reservoir and transfers it through the nylon tubing to the spray nozzles. Auto Mist covers the area with small particles of water-based insecticide. Using this technology, the system controls insects by killing a large number of insects and lowering the reproduction cycle.

**One typical female adult fly can lay 250-1250 eggs in a two-week period. As the temperature warms up, flies start reproducing.**

## Why use Auto Mist?

### Economical

The Auto Mist system can save you money by reducing problems such as contamination, infection, insect transmitted disease, and animal stress. By using this system, more insects will be killed per dollar spent.

### Easy

Installation is simple. A representative in your area can design and install a system to fit your individual needs. You can even install it yourself. Once the system is installed and programmed, all you have to do is keep the insecticide reservoir filled. Auto Mist is designed to be virtually maintenance free.

### Automatic and Effective

The Auto Mist system automatically gives a synchronized spray through strategically placed nozzles that evenly distribute insecticide over an entire facility. No matter what type of facility you have, Auto Mist can give you safer insect control with water-based insecticides and peace of mind that insects aren't bothering your animals.



*The nozzles are connected to the pump/reservoir (above) and are strategically placed throughout a facility.*



## Where Animal Owners are using the Auto Mist System

Auto Mist systems are installed in many different configurations; it has the potential to provide insect control in any area that has an insect problem. Some common areas include:

- horse stables
- livestock barns
- dog kennels
- backyards
- fencing
- facility overhangs

## Typical System Layout

