



EXPERT GUIDANCE. EXPANSIVE CONTROL.

Insect Products for Professionals to Conquer the Great Outdoors.



BROAD SPECTRUM CONTROL FOR THE GREAT OUTDOORS AND MORE

The key to meeting the goal of control for pest management professionals is to have a choice of products that can provide proven efficacy, consistency and long-term control in a variety of scenarios. Zoëcon® Professional Products offers that choice. Applicable to both commercial and residential accounts, Zoëcon® Professional Products offers a broad spectrum of solutions for a broad spectrum of insects that includes mosquitoes, fire ants, cockroaches, crickets, ticks, flies, and other occasional invaders.

Providing highly effective and enduring products is only half the battle, pest management professionals can rely on the exceptional service from Zoëcon professionals. It all started 50 years ago when Zoëcon developed and began manufacturing the IGR (S)-methoprene. Since then, our knowledge base has grown and so has a reputation of reliability. Zoëcon® stands behind the idea that true pest control is achieved through a combination of products and strategies. This resource guide can help in choosing the right Zoëcon® Professional Products to fight the most challenging infestations.





Backyard Mosquito Control with Altosid® Mosquito Larvicides

Featuring the active ingredient (S)-methoprene – an insect growth regulator that prevents larvae from becoming breeding biting adult mosquitoes – Altosid® larvicides are available in a variety of formulations to provide pest control professionals with flexibility. Altosid® formulations have varying lengths of residual control for flexibility and value.

FEATURES

- 30-150 day residual control minimizes need for costly reapplications
- Effective prevention of the emergence of adult mosquitoes that may transmit West Nile virus, Zika virus, chikungunya and dengue fever
- No adverse effect on fish, waterfowl, mammals or beneficial insects
- Ready-to-use formats allowing for easy, low-labor applications
- · Control of mosquito populations all season long

CONTROLS

Mosquitoes

ACTIVE INGREDIENT

(S)-methoprene

Altosid[®] Liquid Larvicide Mosquito Growth Regulator



EPA Reg. #2724-392

| FEATURES

- 5% (S)-methoprene
- Microencapsulated formula

AVAILABLE PRODUCT SIZES

· 16 oz bottle

APPLICATION

Apply as a ground treatment in standing water with equipment capable of applying a fine mist or ULV. Use ULV to apply 3 to 4 fl oz per acre.

RATES

sprayer size	low rate/gal	high rate/gal
1 gal	2.0 ml	2.7 ml
3 gal	6.1 ml	8.1 ml
5 gal	10.2 ml	13.6 ml
30 gal	61.1 ml	118.3 ml

Note: Solutions are measured in increments of gal/ml of Altosid® Liquid Larvicide Mosquito Growth Regulator/1,000 sq ft



Altosid® Briquets (PCO Pack)

EPA Reg. #2724-375

FEATURES

- 8.62% (S)-methoprene
- A sustained release, offering 30 days residual control

APPLICATION

Apply in catch basins, storm drains, roadside ditches, gutters, tires, ornamental ponds, bird baths, and other water-holding containers. Briquets can also be dropped into areas with standing water.

AVAILABLE PRODUCT SIZES

• Pack of 100



Altosid® XR Extended Residual Briquets - 150 Day

EPA Reg. #2724-421

FEATURES

- 2.1% (S)-methoprene
- Formulated to ensure consistent release of active ingredient for up to 150 days of control

APPLICATION

Place one briquet in areas where there is currently standing water or where flooding is anticipated. This includes catch basins, storm water drainage areas, sewers, ornamental ponds, and other water receptacles.

AVAILABLE PRODUCT SIZES

• 4 x 10 briquets per pack



Altosid® Pro-G Insect Growth Regulator

EPA Reg. #2724-451

FEATURES

- 1.5% (S)-methoprene
- Includes convenient shaker top for easy application
- Provides up to 30 days of control

APPLICATION

Apply to stagnant water where mosquitoes breed. Approved for ornamental fountains and ponds, water holding plants, water troughs, birdbaths, pool covers, rain barrels, roof gutters and more.

AVAILABLE PRODUCT SIZES

- 25 lb bottle
- 10 oz shaker bottle

LAVA-LOR® GRANULAR BAIT

Lava-Lor® Granular Bait is a ready-to-use formulation for effective control of cockroaches*, crickets, ants** and other listed pests. Featuring dual active ingredients and a bait matrix that is highly palatable to a wide variety of insects. This solution achieves effective knockdown through multiple modes of action.

ACTIVE INGREDIENTS

- Hydramethylnon 1.0%
- Imidacloprid 0.5%

KILLS

Nuisance ants**, cockroaches*, crickets, earwigs, firebrats and silverfish.

FEATURES

- Ready-to-use, highly palatable formulation
- · Approval for food handling and processing facilities
- No "watering-in" necessary

AVAILABLE PRODUCT SIZES

- 10 oz shaker bottle
- 25 lb pail

APPLICATION

Approved for use in sensitive areas as an indoor and outdoor bait – including turf and perimeter treatments – that can be used in a bait station as well as in a shaker or spreader to reach hard-to-treat cracks and crevices.

RATES

4 to 6 oz per 1,000 sq ft of infested area.



^{*} Excluding American cockroaches

^{**} Excluding Carpenter, Fire, Harvester and Pharaoh Ants

EcoPCO® Aerosol Insecticides

Formulated with botanical active ingredients and traditional chemistries, EcoPCO® contact aerosols offer broad-spectrum pest control in an easy-to-use format. Ideal for sensitive accounts, these pest control solutions allow for flexible applications that deliver both immediate and long-term effectiveness.



EPA Reg. #89459-60

EcoPCO® AR-X Multi Purpose Insecticide

ACTIVE INGREDIENTS

- 2-Phenethyl Propionate 1.0%
- · Pyrethrins 0.4%

AVAILABLE PRODUCT SIZES

17 oz can

FEATURES

- Dual ingredients provide long residual
- · Contains no CFCs
- · Interior and exterior use

KILLS

Ants, carpet beetles, carpenter ants, cockroaches, crickets, drugstore beetles, earwigs, elm leaf beetles, millipedes, pillbugs, scorpions, silverfish, spiders, termites and other listed pests

APPLICATION

Approved for use in sensitive application sites such as homes, hospitals, day-care centers, non-food handling areas in restaurants, commercial kitchens and food processing facilities. Apply this spray as a crack-and-crevice treatment to baseboards and cabinets; walls and ceilings; door and window frames; and around pipes and water lines.

EcoPCO® ACU Insecticide

ACTIVE INGREDIENT

• 2-Phenethyl Propionate 0.1%

FEATURES

· A no odor contact kill

KILLS

Bed bugs, ants, cockroaches, spiders, fleas, brown dog ticks, Southern house mosquitoes, house flies and more listed pests

AVAILABLE PRODUCT SIZES

17 oz can

APPLICATION

Apply as a crack-and-crevice treatment indoors to baseboards and cabinets; ceilings and walls; and around doors and windows. The spray can be applied near refrigerators, sinks, stoves and around pipes. EcoPCO® ACU is generally non-staining and approved for use on rugs, upholstery and pet bedding.

EPA Reg. #89459-59

Professional Fire Ant Control

Zoëcon® products make professional fire ant control easy with solutions featuring the active ingredients Hydramethylnon (an insecticide) and (S)-methoprene (an IGR), providing results when it is needed the most. These easy-to-use baits are approved for both commercial and residential use.

FEATURES

- · Eliminates colonies, hidden and visible
- · Prevents mound movement and colony rebound
- · Affects the queen's reproductive abilities

CONTROLS

Imported and native fire ants, harvester, Argentine ants and other listed pests



EPA Reg. #2724-496

Extinguish® Plus

This fire ant bait contains both the powerful adulticide Hydramethylnon to provide a quick knockdown of workers and foragers and the IGR (S)-methoprene to affect the queen's reproductive system. Extinguish® Plus is a powerful fire ant control tool that provides two-way killing action and long-lasting control.

ACTIVE INGREDIENTS

- Hydramethylnon 0.365%
- (S)-Methoprene 0.250%

FEATURES

- Combination active ingredients
- Sterilizes the queen and kills worker ants
- Effective within the first week the bait is brought back to the mound

AVAILABLE PRODUCT SIZES

- 1.5 lb bottle
- 4.5 lb bottle
- 25 lb bag

APPLICATION

Including but not limited to, residential and commercial turf, golf courses, school grounds, sod farms, nurseries, cemeteries, parks, athletic fields and many more locations.

RATES

Individual Mounds - 2 to 5 level tbs distributed uniformly around the mound. **Broadcast Treatment (Fire Ants)** - 1.5 lb/acre [3 oz/5,000 sq ft] broadcast bait uniformly with ground (granular spreaders) or aerial equipment.



EPA Reg. #73342-1-2724

ProBait® Formulation for Professionals

ProBait® fire ant bait provides relief by killing labeled ants immediately after ingestion. It is fire ant control made easy with the active ingredient, Hydramethylnon, providing fast results when it is needed most.

ACTIVE INGREDIENT

• Hydramethylnon 0.73%

FEATURES

- Kills the aueen
- Destroys the mound

AVAILABLE PRODUCT SIZES

AVAILABLE PRODUCT SIZES

• 25 lb bag

- 4.5 lb bottle
- 25 lb container

APPLICATION

Can be applied to residential turf and landscapes, parks and golf courses. Apply when the ants are active, typically when soil temperature is greater than 60° F.

RATES

Individual Mounds - 2 to 5 level tbs distributed uniformly around the mound Broadcast Applications - 1 – 1.5 lb/acre [2 to 3 oz/5,000 sq ft] broadcasted uniformly with ground equipment (granular spreaders).



EPA Reg. #2724-475

Extinguish® Professional Fire Ant Bait

Extinguish® Professional Fire Ant Bait affects the fire ant queen's reproductive abilities with the IGR, (S)-methoprene.

ACTIVE INGREDIENT

• (S)-Methoprene 0.5%

FEATURES

- Sterilizes the gueen
- Controls and eliminates colonies; no mound movement.
- 1 bag treats 25 acres
- No withdrawal period or grazing restrictions

APPLICATION

Anywhere fire ants are found, including, but not limited to residential turf, landscapes, school grounds, crops, fruit trees, pastures, and more. Great for use around flowers, shrubs and trees.

RATES

Individual Mounds - 3 to 5 tbs per mound sprinkled in adjacent areas of the mound, applying evenly in a manner to encompass the mound to a perimeter of 4 ft.

Broadcast Application (Fire Ants) - 1 to 1.5 lbs of product per acre (3.5 tbs/1000 sq ft) using backpack, hand, or motorized mechanical equipment.



EPA Reg. #2724-478

Mavrik® Perimeter

Mavrik® Perimeter is an insecticide that provides immediate knockdown power without harming ornamental plants or shrubbery.

CONTROLS

Mosquitoes, ants, spiders, ticks, springtails, cockroaches, fire ants (perimeter treatment) and other listed pests

ACTIVE INGREDIENT

• Tau-fluvalinate 22.3%

FEATURES

- Perimeter treatment
- · Dried residues are non-toxic to bees
- Immediate knockdown of ants and mosquitoes
- No "watering-in"

AVAILABLE PRODUCT SIZES

• 8 oz bottle

APPLICATION

Apply on plantscapes including trees and shrubs and for perimeter treatment around buildings and outside surfaces.

RATES

5 Gallons: 0.2 to 0.5 fl oz (6–15 ml) **1 Gallon**: .04 to 0.1 fl oz (1.2–3 ml) Apply the spray mixture at a volume equivalent to 5 gal per 1,000 sq ft

See product label for complete dillution and application rate instructions.

Synergists

Featuring piperonyl butoxide, Zoëcon® synergists provide additional power and performance to insecticide products, allowing for reduced rates and increased knockdown as well as decreased resistance.



ExciteR™

RATES

EPA Reg. #89459-41

CONTROLS

Ants, bed bugs, cockroaches, fleas, mosquitoes, house flies, stored product pests and other listed pests

ACTIVE INGREDIENTS

- · Pyrethrins 6%
- Piperonyl Butoxide, Technical 60%

| FEATURES

- · Insecticide plus synergist
- Increases the speed and knockdown of most adulticides
- No odor
- · Can be diluted with water or oil

AVAILABLE PRODUCT SIZES

• 1 pt bottle

RATES

Mix with other insecticides at the rate of $\frac{1}{4}$ to $\frac{1}{2}$ floz per gallon of finished spray.

PBQ-8 Synetyid PBC-8 Synetyid PBC-8

PBO-8® Synergist

EPA Reg. #89459-33

AIDS IN CONTROL

Use with active ingredients of your choice as a tank-mix partner to increase efficacy and speed of control

ACTIVE INGREDIENT

Piperonyl Butoxide 91.3%

FEATURES

- Approved for use in food handling areas
- No known resistance, ideal for pest control resistance management
- For use in residential dwellings or indoors in commercial or institutional buildings

RATES

See product label for complete application rates.

AVAILABLE PRODUCT SIZES

- 1 at bottle
- 1 gal bottle

APPLICATION

Apply alone as a fogging, general surface, space, spot or crack-and-crevice treatment or combined with additional insecticide as a tank mix synergist. Approved for use both outdoors and indoors, including use for food handling pest control in kitchens, cafeterias, federally inspected meat and poultry plants and more.

APPLICATION

Add as a tank mix synergist to insecticide products applied indoors and out.



EPA Reg. #89459-51

Lambda 9.7 CS

An ideal solution for backyard pest control accounts, Lambda 9.7 CS is an encapsulated insecticide which will not break down in heat and UV exposure, resulting in a longer residual control and reduced callbacks.

CONTROLS

Ants, bed bugs, beetles, spiders, termites (above ground only), ticks, wasps and other listed pests

ACTIVE INGREDIENT

• Lambda-Cyhalothrin 9.7%

AVAILABLE PRODUCT SIZES

• 1 at bottle

FEATURES

- Perimeter applications for backyard pest control
- Tank mix with an insect growth regulator (IGR) for complete control
- Can be converted to foam to treat structural voids

RATES

See product label for complete dilution and application rate instructions.

APPLICATION

Apply outdoors for broad spectrum insect control which will not break down in heat and UV exposure. Apply as a crack-and-crevice or spot treatment. Approved for use in sensitive application sites, including kitchens as a food handling pest control solution.

Pyronyl™ UL-300 Oil Concentrate

A dual-synergist pyrethrin-based insecticide, Pyronyl™ UL-300 is the ideal solution for the quick kill and flushing action of labeled flying and crawling insects.

Concept of 16

EPA Reg. #89459-27

CONTROLS

Mosquitoes, flies and other listed pests

ACTIVE INGREDIENTS

- Pyrethrins 3%
- Piperonyl Butoxide 6%
- N-Octyl Bicycloheptene Dicarboximide 10%

AVAILABLE PRODUCT SIZES

- 1 gal bottle
- 55 gal drum

FEATURES

- Dual-synergist formulation provides flushing action
- Provides effective control of cockroaches
- Approved for use around containers of stored food

RATES

Undiluted Spray - Apply at a rate of 0.18 fl oz per 1,000 cu ft of space.

Diluted Surface Spray - To kill cockroaches - dilute 4 1/4 fl oz to make one gal of finished solution in oil and apply at a rate not to exceed 55.8 fl oz per 1,000 sq ft.

APPLICATION

Apply diluted and undiluted as an indoor spray.
Approved for pest control in food handling facilities, animal quarters and barns.

Professional Fly Baits

The Zoecon® lineup of fly baits offer fast-acting solutions for professional nuisance fly control. These ready-to-use granular baits attract and quickly kill problem flies, and can be used in rotation to fight resistance.

FEATURES

- · Attracts and kills house flies
- · Ready-to-use
- · Controls flies resistant to carbamates and pyrethrin sprays
- · Can be used in commercial and rural areas
- · Starts killing flies rapidly after feeding
- · Daily use, scattered or in a bait station
- Three unique chemical classes for resistance control

APPLICATIONS

For industrial, residential commercial and agricultural settings indoors and outside the non-food/feed areas of restaurants, barns, taverns, supermarkets, commissaries and bakeries.



EPA Reg. #2724-812

Starbar® QuikStrike® Fly Bait

KILLS

House flies

ACTIVE INGREDIENTS

- Dinotefuran 0.50%
- (Z)-9-Tricosene 0.04%

AVAILABLE PRODUCT SIZES

- 1 lb container
- 5 lb container
- 40 lb container

RATES

Broadcast - Apply at a rate of 1/4 lb per 500 sq ft of area. Reapply as bait is consumed to maintain control. **Bait Station** - Position four bait stations in each 500 sq ft of area with 1 oz of bait per station.

Starbar® Golden Malrin® Fly Bait



EPA Reg. #2724-274

KILLS

House flies

ACTIVE INGREDIENTS

- Methomyl 1%
- (Z)-9- Tricosene 0.049%

AVAILABLE PRODUCT SIZES

- 10 lb container
- · 40 lb container

RATES

Broadcast - Apply at a rate of 1/4 lb per 500 sq ft of area. Reapply as bait is consumed to maintain control. **Bait Station** - Add 1 oz to each of 4 bait stations and space equally within a 500 sq ft treatment area.



EPA Reg. #100-1541-89459

Cyanarox™ Insecticidal Bait

CONTROLS

House flies

ACTIVE INGREDIENT

• Cyantraniliprole 0.5%

AVAILABLE PRODUCT SIZES

- 4 lb pail
- 28 lb pail

ENTROPY BAIT STATION FLY BAIT STATION For the sea

Starbar® Fly Bait Station

BENEFITS

- · For use with fly scatter baits
- Mess-free design
- Eliminates unsightly debris from scatter baits
- Versatile design allows for use with all scatter baits

RATES

Broadcast - Apply 0.2 lb (3.2 oz) of Cyanarox[™] Insecticidal Bait per 1,000 sq ft when fly populations are low. Apply 0.4 lb (6.4 oz) of bait per 1,000 sq ft when populations are high. Reapply bait every 7 days until fly population is at acceptable levels.

Bait Station - Apply 0.2 lb (3.2 oz) of Cyanarox™ Insecticidal Bait when fly populations are low using enough bait stations to make the fly bait available per 1,000 sq ft. Apply 0.4 lb (6.4 oz) of bait in bait stations per 1,000 sq ft when populations are high.

AVAILABLE PRODUCT SIZES

• 1 per box

Musca-Cide® Fly Bait Spray

With its fast acting formulation, Musca-Cide® Fly Bait Spray offers both spray and paint-on applications. It is a flexible way to attract and kill house flies.

CONTROLS

House flies

ACTIVE INGREDIENT

- Dinotefuran 0.50%
- (Z)-9-Tricosene 0.04%

APPLICATION

Apply via tank sprayer, trigger spray bottle, paint roller, or paint brush to walls, beams, on and around doors, garbage bins and chutes to clear house fly infestations.

FEATURES

- · Water-dilutable formulation
- One bottle provides 1,500 sq ft of coverage
- Fast-acting to provide guick knockdown

AVAILABLE PRODUCT SIZES

• 12 oz bottle

RATES

2 oz treats 250 sq ft



EPA Reg. #2724-838-89459

rly TRAPS

Sticky Fly Traps

Attracting flies two ways, with color or with a powerful sex pheromone, our sticky fly traps have the capability to trap more than three times the amount of flies than traditional sticky fly traps. Their large trapping surfaces and compact designs provide mess-free and odor-free fly control solutions.

CONTROLS

Flies and other listed pests

FEATURES

- · Traps more flies with no trap odor
- · Ideal for gardens, patios, backyards and picnic areas
- 100% insecticide free

APPLICATIONS

Containing no harmful chemicals, these insecticide-free fly traps are great for both indoor and outdoor use. The special long-lasting rain-proof adhesive makes them an ideal choice around restaurants, food trucks, kennels, gardens and homes. Just hang up or place wherever flies are the most active.



Starbar® EZ Trap®

AVAILABLE PRODUCT SIZE

• 2 pack box

Musca-Stik™

AVAILABLE PRODUCT SIZE

• 1 each, 24 inches



Musca-Stik Jr.™

AVAILABLE PRODUCT SIZE

1 each, 12 inches



Starbar® Disposable Fly Traps

Catching thousands of flies, the lineup of Starbar® fly traps is an easy and ideal solution for getting rid of nuisance flies. The water-based traps lure flies in with the dual action fly attractant where they drown from exhaustion. Starbar® fly traps are easy to use and cost effective.

CONTROLS

Flies and other listed pests

FEATURES

- · Can be used around pets
- Easy-to-use
- Disposable and reusable versions
- Year-round durability

STARBAR® FLY TRAP ATTRACTANT **ACTIVE INGREDIENTS**

- Putrescent Whole Egg Solids 20.5%
- Indole 0.2%*
- Trimethylamine 0.6%
- (Z)-9-Tricosene 1.0%
- EPA Reg. #89459-11

APPLICATION

Add water plus attractant and hang in sunlit areas or where flies congregate. When the trap is full of dead flies, empty and re-use or just toss it out.







Starbar® FlyRelief™ **Disposable Fly Trap**

AVAILABLE PRODUCT SIZE

• 1 each



AVAILABLE PRODUCT SIZE

• 2 qt jug (Reusable)

Starbar® Fly Terminator® Pro

AVAILABLE PRODUCT SIZE

• 1 gal jug (Reusable)

Starbar® Fly Trap **Attractant**

AVAILABLE PRODUCT SIZE

• 8x30g water soluble packs

^{*}Generated from trimethylamine HCL 1.00%



ADDING TO THE LEGACY

Zoëcon, a leader in the pest control industry, has been committed to innovation since its founders invented insect growth regulator (IGR) technology over fifty years ago. With our legacy brands — Gentrol®, Precor®, and Zenprox®, and the products featured in this brochure, Zoëcon® products have the solutions to help round out professional protocols. Learn more about our storied past and the comprehensive Zoëcon® Professional Product lineup at zoecon.com.



For more information, visit our website at Zoecon.com or call 1-800-248-7763



Altosid, Cyanarox, Excite-R, Extinguish, Gentrol, Golden Malrin, Lava-Lor, Mavrik, PBO-8, , Precor, Probait, Pyronyl, Quikstrike, Starbar, Starbar with design, Zenprox, Zoecon, and Zoecon with design are trademarks of Wellmark International. Captivator, EZ Trap, Fly Terminator, FlyRelief, Musca-Cide, Musca-Stik, Musca-Stik Jr, and Red to Yellow color gradation are trademarks of Farnan Companies, Inc. Central Life Sciences with design is a registered trademark of Central Garden & Pet Company. EcoPCO is a registered trademark of Kittrich Corporation