**TM** 





Contains pyriproxyfen, the active ingredient used in Archer® Insect Growth Regulator.

#### Insecticide

An insect growth regulator (IGR) for use in homes, apartments, schools, warehouses, offices, and other private, commercial or public buildings; in food and non-food areas of restaurants, food warehouses, and food-handling and food-processing establishments; in transport vehicles and animal housing facilities; and outdoor treatments on and adjacent to buildings and structures, on lawns, and in pet areas

ACTIVE INGREDIENT: (% by	/ weight)
Pyriproxyfen: 2-[1-methyl-2-(4-phenoxyphenoxy) ethoxy] pyridine:	1.3%
OTHER INGREDIENTS:	. 98.7%
TOTAL:	. 100.0%

\*Contains petroleum distillates

Nixlo™ 1.3% EC is an emulsifiable concentrate (EC) formulation that contains 0.092 lb. of active ingredient per gallon

EPA Reg. No.: 91234-338

# KEEP OUT OF REACH OF CHILDREN **CAUTION**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See below for additional Precautionary Statements.

FIRST AID				
If swallowed:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Do not give any liquid to the person.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>			
If on skin or clothing:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
If inhaled:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>			
If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
NOTE TO PHYSICIAN				
Contains petroleum distillate – vomiting may cause aspiration pneumonia.				
HOT LINE NUMBER				
	container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at 1-844-685-9173 for cal treatment information.			

For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

Nixlo™ 1.3% EC is not manufactured, or distributed by Syngenta Professional Products, seller of Archer® Insect Growth Regulator.



# PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# **CAUTION**

Harmful if swallowed, absorbed through skin, or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing mists or vapor. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Wear long sleeved shirt and long pants, shoes plus socks; and appropriate chemical-resistant gloves. Wear appropriate protective eyewear, if applicable.

#### **User Safety Recommendations**

Applicators and other handlers should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- . Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change clothing.

#### ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

For terrestrial uses: Do not apply directly to bodies of water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsate.

### PHYSICAL OR CHEMICAL HAZARDS

Combustible: Do not use or store near heat or open flame. Do not mix or allow coming in contact with Oxidizing agents. Hazardous Chemical reaction may occur.

Do not use this product in or on electrical equipment due to possibility of shock hazard.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all precautions and use directions completely before use.

#### FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR INSECT CONTROL OR ILLEGAL RESIDUES.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

#### PRODUCT INFORMATION

The active ingredient in Nixlo 1.3% EC is pyriproxyfen, an insect growth regulator that mimics juvenile hormone occurring naturally in insects. Pyriproxyfen primarily affects the immature life stages of the target insect, preventing the normal development of adult forms. In some insect species, such as fleas and flies, Nixlo 1.3% EC also has activity on adults by affecting the reproductive organs, resulting in a reduction of the reproductive capability of these pests.

Nixlo 1.3% EC will control listed pests, including ants, cockroaches, crickets, fleas, litter beetles, ticks, and flying insect pests in and around homes and apartments; food and non-food storage and preparation areas of agricultural, industrial, institutional and commercial buildings; and transport vehicles. Nixlo 1.3% EC may be used around structures with treatments to soil, mulch, perimeter landscape plantings or grass to prevent indoor invasion by listed pest species.

- Use of Nixlo 1.3% EC provides effective control of listed pests by preventing the development of juvenile pest stages.
- Nixlo 1.3% EC can be used as part of an integrated pest management (IPM) program, in combination with other insecticides or alone, and as an aid to prevent the development of insecticide resistance. See Resistance Management for more information.
- Nixlo 1.3% EC is stable in sunlight for up to 14 days, delivering effective residual control of outdoor pests such as fleas and cockroaches, even in areas with direct sunlight.
- When used as directed, Nixlo 1.3% EC retains activity against pre-adult fleas for up to 7 months and pre-adult cockroaches for up to 6 months.
- Nixlo 1.3% EC reduces egg production in house flies and prevents larval development into adults.

#### **USE RESTRICTIONS**

Follow directions for specific use areas.

- Do not apply directly to any natural bodies of water, such as ponds, lakes, streams, rivers, marshes, and estuaries.
- Do not allow adults, children, or pets to contact treated surfaces until area treated has completely dried.
- When used to treat rooms in hospitals, convalescent facilities, or nursing homes, patients must be removed prior to treatment. Do not allow patients to return to the treated rooms until rooms have been ventilated thoroughly for two hours after treatment.
- Do not apply to aircraft cabins.
- **Do not** apply directly to raw agricultural food/feed commodities in warehouses or transportation vehicles. **Nixlo 1.3**% **EC** may be applied in storage areas where sealed food items, such as bottled, boxed, or canned items, are stored so that contact with food or feed items is unlikely. Warehouses used to store raw or cured tobacco must only be treated when empty and must only be used to store tobacco again when treatments have completely dried.
- Do not apply Nixlo 1.3% EC to interior areas of animal-production facilities or pet kennels when animals are present. Allow treated areas to dry before returning animals to treated areas of facility.
- Do not apply directly to domestic animals and pets.
- Nixlo 1.3% EC may only be used in serving areas when facility is not in operation or food is not exposed.

# **USE PRECAUTIONS**

- · Avoid excessive wetting of carpet, draperies, and furniture. Always test in a hidden area prior to use, as some natural and synthetic fibers may be adversely affected by any liquid product.
- Nixlo 1.3% EC does not stain surfaces when used as directed. Some fibers or surfaces may be affected by an application of any liquid product. If staining is a concern, test the spray dilution in a small, inconspicuous area prior to application.
- When making an application to vinyl siding, treat a small area and allow it to dry. Some types of vinyl siding, particularly if aged or weathered, may show some staining after application of an emulsifiable concentrate product.

## **RESISTANCE MANAGEMENT**

For resistance management, Nixlo 1.3% EC contains a Group 7C insecticide. Any insect population may contain individuals naturally resistant to Nixlo 1.3% EC and other Group 7C insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same use sites. Appropriate resistance management strategies should be followed.

To delay development of insecticide resistance, the following practices are recommended:

- Rotate the use of Nixlo 1.3% EC or other Group 7C insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. **Do not** rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - o Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - o Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - o When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).



- o Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- o The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- . Contact your local extension specialist or certified crop advisors for any additional pesticide resistance management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, you may contact your local Atticus, LLC representative or by calling 984-465-4800.

#### **SPRAY DRIFT**

#### **Boom-less Ground Applications:**

- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- . Do not apply during temperature inversions.

#### SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

#### WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift

#### **Boom-less Ground Applications:**

· Setting nozzles at the lowest effective height will help to reduce the potential for spray drift

#### **Handheld Technology Applications:**

• Take precautions to minimize spray drift

#### **USE SITES**

Table 1: Examples of specific areas where Nixlo 1.3% EC treatments may be made include, but are not limited to, the areas listed below.

Aircraft (Cargo Areas Only)	Dormitories	Lawns	Railroad Cars
Animal Quarters	Draperies	Livestock Housing	Recreation Vehicles
Animal Research Facilities	Drugstores	(Unoccupied)	Restaurants
Apartments	Egg Production Facilities	Living Rooms	Rugs
Attics	Factories	Locker Rooms	Schools And Child Care Centers
Bakeries	Farm Buildings	Mattresses	Ships
Barns	Feedlots	Meat And Produce Canneries	Soil
Bathrooms	Floors	Meat Processing Plant	Storage Areas
Basements	Flour Mills	Mess Halls	Stored Food Areas
Bed Frames	Food-Handling Areas*	Mobile Canteens	Stored Food Warehouses
Bedrooms	Food-Packing Plants*	Mobile Homes	Stores
Bottling Facilities	Food-Processing Plants*	Motels	Supermarkets
Cabinets	Food-Storage Areas*	Mulch	Swine Facilities (Unoccupied)
Cabins	Food Warehouses*	Nursing Homes	Theaters
Box Springs	Funeral Parlors	Office Buildings	Tobacco Plants And
Breweries	Garages	Outdoor Eating Establishments	Warehouses
Buses	Garbage Cans	Outdoor Pet or Animal Runs or Enclosures	Townhouses
Cafeterias	Gazebos	Pantries	Trailers
Candy Plants	Grain Storage Facilities	Patios	Trains
Cargo Holds	Grocery Stores	Pet Bedding	Transport Vehicles
Carpets	Homes	Pet Carriers	Upholstered Furniture
Casinos	Hospitals	Pet Grooming Parlors	Utility Rooms
Closets	Hotels	Pet Living/Sleeping Area	Veterinaries
Coffee Houses	Indoor Eating Establishments	Pet Stores	Warehouses
Commercial Buildings	Industrial Plants	Porches	Washrooms
Condominiums	Institutions	Poultry Houses (Unoccupied)	Yards
Crawl Spaces	Institutional Dining Areas	Prisons	Zoos
Dairies	Jails	Public Buildings	
Decks	Kennels		
Dens	Kitchens		
Dog Houses	Landscape Plantings		
Dog Kennels			

<sup>\*</sup> See **Treatments in Food-Handling Establishments** for special instructions.



#### MIXING DIRECTIONS

Nixlo 1.3% EC is an emulsifiable concentrate (EC).

Nixlo 1.3% EC is mixed with water and applied with application equipment, such as hand-held, backpack, or power spray equipment (see Tables 2 and 3). Prepare an application dilution according to the rate recommendation for the target pest given in Table 4.

#### Mixing Sequence:

- 1. Fill applicator container ½ full with water.
- 2. Add the amount of Nixlo 1.3% EC to container as recommended in the rate table for the listed pest.
- 3. Shake, stir, or agitate.
- 4. Fill applicator tank with water to final volume recommended in rate table.
- 5. Re-anitate.
- 6. To ensure optimal control, prepared dilutions should be used within 24 hours and should be re-agitated if diluted material is not used for several hours.

#### USE RATES FOR INTERIOR OR EXTERIOR LOW-VOLUME APPLICATIONS:

#### Table 2: Mixing Directions for Interior or Exterior Low-Volume Applications

Amount of Nixlo 1.3% EC per gallon of water	Amount of Nixlo 1.3% EC per unit area¹	
(% Pyriproxifen in dilution)	1,000 sq ft	1,500 sq ft
1.0 fl oz (0.01%)	1.0 fl oz	1.5 fl oz
1.5 fl oz (0.015%)	1.5 fl oz	2.25 fl oz
2.0 fl oz (0.02%)	2.0 fl oz	3.0 fl oz

For interior applications by hand sprayers, use 1 gallon of finished dilution per 1,500 sq ft surface area. For exterior hand sprayer or backpack applications, 1-3 gallons of finished dilution per 1,000 sq ft is recommended.

#### **USE RATES FOR EXTERIOR HIGH-VOLUME SPRAYS**

#### Table 3: Mixing Directions for Exterior High-Volume Power Sprays1:

Desired Dilution	Amount of Nixlo 1.3% EC per volume of finished dilution		
(% Pyriproxifen in Dilution)	25 gallons mixed	50 gallons mixed	
0.001%	2.5 fl oz	5 fl oz	
0.002%	5.0 fl oz	7.5 fl oz	
0.003%	7.5 fl oz	15 fl oz	

<sup>&</sup>lt;sup>1</sup> For exterior high-volume applications (power sprays), 4-10 gallons of finished dilution per 1,000 sq ft is suggested.

#### TREATMENTS IN COMBINATION WITH AN ADULTICIDE

Nixlo 1.3% EC may be combined with other insecticides to enhance control of adult insects. The combination provides for immediate control of adult fleas, cockroaches, crickets, and flying insects, while inhibiting the development of the immature stages of the pest insect. This application should conform to use precautions and use directions for both products.

#### TREATMENTS IN FOOD-HANDLING ESTABLISHMENTS

(Places other than private residences in which food is held, processed, prepared, or served)

#### **Applications in Nonfood Areas**

Nixio 1.3% EC may be applied as a general surface, spot, or crack-and-crevice treatment in nonfood areas. Nonfood areas include areas such as garbage rooms, lavatories, floor drains (to sewers), entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, garages, mop closets, and storage (after canning or bottling).

#### **Applications in Food Areas**

Nixio 1.3% EC may be applied as a general surface, spot, or crack-and-crevice treatment in food areas of food-handling establishments, restaurants, or other areas where foods are commercially prepared or served. Food areas of food handling establishments include areas for receiving, serving, storage (dry, cold, frozen, raw), packaging (canning, bottling, wrapping, boxing), preparing (cleaning, slicing, cooking, grinding), edible waste storage, and enclosed processing systems (mills, dairies, edible oils, syrups). Nixio 1.3% EC may only be used in serving areas when facility is not in operation or food is not exposed. Serving areas are areas where prepared foods are served, such as dining rooms, but excluding areas where foods may be prepared or held. In the home, all food-processing surfaces and utensils must be covered during treatment or thoroughly washed and rinsed with notable water before use.

# **Applications in and around Food Warehouses**

Nixio 1.3% EC may be applied as a general surface, fogging/ULV, spot, or crack-and-crevice treatment in food and nonfood storage warehouses or in warehouses where direct contact with stored food items is not anticipated.

Apply to all areas that may harbor pests, including under and between pallets. Warehouses used to store raw or cured tobacco must only be treated when empty and must only be used to store tobacco again when treatments have completely dried.

# **APPLICATION DIRECTIONS**

Nixlo 1.3% EC must be mixed in water, using the marked increments on the squeeze-and-pour bottle according to the rates in the following table. For crack-and-crevice or spot treatments, follow the rate per gallon of water<sup>1</sup>. For area and general surface treatment, follow the rate per unit area<sup>2</sup> to ensure good coverage.

# **Use Rates by Pest**

#### **Table 4: Application Rates for Listed Pests:**

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PEST	¹AMOUNT OF Nixlo 1.3% EC PER GALLON WATER	<sup>2</sup> AMOUNT OF Nixlo 1.3% EC PER 1,000 SQ FT	COMMENTS
Ants	2 fl oz/gal	2 fl oz/	Apply to nesting and traveled areas.
	(0.02%)	1,000 sq ft	
		(0.0014 lb. ai)	
Carpet beetles	1 fl oz/gal	1 fl oz/	Increase carrier (water) volume as necessary for penetration of dense
Fleas	(0.01%)	1,500 sq ft	materials, e.g., thick carpet and vegetation along exterior walls.
Ticks **		(0. 0007 lb. ai)	
Cockroaches	2 fl oz/gal	2 fl oz/	Increase carrier (water) volume as necessary for good surface wetting (e.g.,
(Such as German, Asian, and brown-banded)	(0.02%)	1,000 sq ft	in mulch) along exterior walls.
Crickets	·	(0.0014 lb. ai)	

(continued)



PEST	¹AMOUNT OF Nixlo 1.3% EC PER GALLON WATER	<sup>2</sup> AMOUNT OF Nixlo 1.3% EC PER 1,000 SQ FT	COMMENTS
Flying insects:	1 fl oz/gal	1 fl oz/	Wet surfaces used for resting and breeding.
Flies	(0.01%)	1,500 sq ft	
Gnats		(0.0007 lb. ai)	
Midges	For Fogging/ULV where allowed:	For Fogging/ULV where allowed:	
Mosquitoes	1.5 fl oz diluted in appropriate carrier	1.5 fl oz diluted in appropriate carrier	
Moths		per 12,000 cu ft	
		(0.0011 lb. ai)	
Litter beetles:	1 fl oz/gal	1 fl oz/	Wet surfaces used for resting and breeding. Increase carrier (water) volume
Carrion beetles *	(0.01%)	1,000 sq ft or	as necessary for penetration of litter and bedding materials.
Dermestids		1,000 linear ft for	
Darkling beetles		crack and crevice	
Hide beetles *		(0.0007 lb. ai)	
Stored product pests:	1.5 fl oz/gal	1.5 fl oz/	To provide more immediate control of adult insects, use in conjunction with
Cigarette beetles	(0.01%)	1,500 sq ft	an adulticide.
Confused flour beetles		or 1,000 linear feet	If application is being made in food areas, read and follow instructions listed
Dermestid beetles		for crack-and-crevice	in Treatments in Food-Handling Establishments.
Indian meal moth		(0.0011 lb. ai)	
Lesser grain borers		For fogging/ULV applications where	
Merchant grain beetles		allowed, dilute 1.5 fl oz in an appropriate carrier	
Red flour beetles		and apply at a rate of 1.5 fl oz per	
Rice moths		12,000 cu ft.	
Saw-toothed grain		,	
beetles			
Tobacco moths			
Warehouse beetles			

Common units of measure: 1 fl oz = 28 mL; 1 pt = 16 fl oz; 1 gallon = 3.8 L

# USE DIRECTIONS FOR SPECIFIC PESTS CONTROL OF ANTS

#### **Indoor Application**

Apply Nixlo 1.3% EC as a general surface, spot, or crack-and-crevice treatment as part of an integrated pest management program. Use Nixlo 1.3% EC at the rate of 2 fl oz/1000 sq ft to interior areas where ants are foraging. For best results, use Nixlo 1.3% EC in combination with baits and/or residual spray treatments. Allow treated surfaces to dry completely before allowing adults, children, or pets to contact treated surfaces.

If application is made in a food-handling establishment, see Treatments in Food-Handling Establishments for additional instructions,

#### **Outdoor Application**

Apply Nixlo 1.3% EC as a broadcast, spot, or crack-and-crevice treatment to outdoor surfaces. Apply 2.0 fl oz/1,000 sq ft to the perimeter of structures (in a 6- to 10-ft band) and to ant trails and foraging areas of lawns and landscaped areas. Treat ant mounds directly so that thorough coverage is achieved. Nixlo 1.3% EC may be used in combination with baits or adulticides as part of an integrated pest management program. For outdoor power spraying with higher application volumes (5-10 gal/1.000 sg ft), use 5 - 15 fl oz/50 gallons water. (Refer to mixing table above.)

# CONTROL OF CARPET BEETLES, FLEAS, AND TICKS

Nixlo 1.3% EC acts on immature stages of carpet beetles, fleas, and ticks to prevent the development of adults. Nixlo 1.3% EC causes a gradual reduction and elimination of the pest population by breaking the reproductive cycle by stopping the normal development of immature pest stages. Nixlo 1.3% EC can sterilize adult female fleas and can control adults by disrupting the normal function of reproductive organs.

As part of a complete flea and tick control program, Nixlo 1.3% EC can be used alone or mixed with an adulticide, prior to or during the flea and tick season. Application of Nixlo 1.3% EC to areas where pets and other animals are known to frequent, and where previous infestations have been known to occur, will prevent the emergence of adult ticks and fleas by affecting immature stages. This early usage, when used as directed, could reduce the need for additional insecticides during the flea and tick season. Treatment of these areas before the fleas become biting and reproductive adults will aid in reducing developing populations.

Flea and tick control on pets is important to the prevention of the introduction of adult fleas. For best results, pets should be treated with an EPA-registered on-animal insecticide, or an effective flea powder, spray, dip, shampoo, or systemic product, as part of a complete flea and tick control program to complement the activity of **Nixlo 1.3% EC**.

#### **Indoor Applications**

Apply dilution of **Nixlo 1.3% EC** at the rate of 1 gal/1,500 sq ft of surface area, or in sufficient volume to achieve adequate coverage. Prior to treatment, carpets, draperies, upholstered furniture, pet bedding or resting areas, and closets should be vacuumed thoroughly, and the vacuum cleaner bag disposed of in an outdoor trash receptacle. Treat all areas that may harbor fleas, ticks, or carpet beetles, including carpets, furniture, pet sleeping areas, and throw rugs. Treat under cushions of upholstered furniture and where pets may rest. If needed, repeat treatments with **Nixlo 1.3% EC** may be made 21 days after previous treatment.

#### **Outdoor Annlications**

Apply Nixlo 1.3% EC as an outdoor broadcast, spot, and crack-and-crevice treatment for preventive or remedial control of flea and tick infestations around residential and non-residential buildings, kennels (inside and outside), animal runs, lawn areas and other areas animals frequent. Applications to those areas that are most frequented by pets will be most successful. Remove animals before applying and do not return animals to treated areas until area treated has completely dried. Apply at 1 fl oz/1,500 sq ft in a volume sufficient to provide adequate coverage. Apply directly to buildings, resting areas, walls, floor, animal bedding and run areas. If needed, repeat treatments with Nixlo 1.3% EC may be made 14 days after last treatment or, if heavy rainfall occurs, repeat as necessary.

If a high population of adult fleas, ticks, or carpet beetles is present, the use of an adulticide may be necessary for immediate control. Nixlo 1.3% EC may be combined with flea adulticides. Nixlo 1.3% EC complements the rapid activity of an adulticide by providing long-term control of immature fleas before they develop into biting adults. This application must conform to use precautions and directions for both products used in a tank mix.

# CONTROL OF COCKROACHES AND CRICKETS

Nixlo 1.3% EC acts on the nymphal stages of German, Asian, and brown-banded cockroaches and crickets, which prevents them from developing into adults. Repeated (weekly, monthly, or quarterly) applications of Nixlo 1.3% EC alone or with an adulticide will result in the development of cockroaches with twisted wings due to the insect growth regulator effects of Nixlo 1.3% EC. When used as directed, Nixlo 1.3% EC renders the cockroaches unable to reproduce, thereby breaking the breeding cycle of the cockroach population.

Use of multiple integrated pest management tactics such as sanitation, food source reduction, and selective application of insecticides can help provide long-term control of cockroach populations. Using Nixlo 1.3% EC in combination with cockroach baits and/or sprayable adulticides is a good strategy to reduce the risk of developing insecticide resistance.

If a high population of adult cockroaches is present, the use of an adulticide may be necessary for immediate control. **Nixlo 1.3% EC** complements the rapid activity of adulticides by providing long-term (up to 6 months) control of cockroach nymphs before they become reproductive adults. Applications of insecticide mixtures should conform to accepted use precautions and directions for both products. Use **Nixlo 1.3% EC** at application rates specified above.



<sup>\*</sup>Not registered for use by California

<sup>\*\*</sup>In California, only registered for use on Lone Star ticks

#### **Indoor Applications**

Apply dilution of **Nixlo 1.3% EC** at the rate of 1 gal/1,000 sq ft of surface area as a spot treatment, surface application, or crack and crevice application. Special attention should be paid to typical cockroach harborages, such as along and behind baseboards; beneath sinks; and behind and beneath stoves, refrigerators, and cabinets. Apply to cracks and crevices; around garbage cans and cabinets; along the outside of baseboards, door and window sills; around door and window frames and floors; around and on drains, pipes, plumbing; behind bookcases; in storage and other utility installation areas; in storage areas; on infested furniture; and to the inside of cabinets and closets. Repeat every 3 months or more frequently as necessary. Allow treated surfaces to dry completely before allowing adults, children, or pets to contact treated surfaces.

If application is made in a food-handling establishment, see instructions in the Treatments in Food-Handling Establishments section of this label.

#### **Outdoor Applications**

Apply a finished dilution of **Nixlo 1.3% EC** in a band 6-10 ft wide adjacent to the foundation wall of the structure and apply to a height of 2-3 ft on the foundation where pests may be active or may find entrance. Apply as a residual application around window frames, doors, garage doors, patios, carports, shutters, around garbage areas, around moist areas, or to other areas where cockroaches may congregate. If needed, repeat treatments with **Nixlo 1.3% EC** may be made 14 days after previous treatment, or if heavy rainfall occurs, repeat as necessary.

#### CONTROL OF FLYING INSECT PESTS

Apply Nixlo 1.3% EC at the rate of 1 fl oz/gallon of water or 1 fl oz/1500 sq ft to control of house flies, stable flies, moths, mosquitoes, nuisance flies (such as gnats, midges), and other similar flying insect pests. Nixlo 1.3% EC is similar to insect growth hormones that occur naturally in flies and other flying insects, having effects on both adult and juvenile stages. In house flies, Nixlo 1.3% EC causes a decrease in the number and hatching of eggs laid by treated adults. Fly larvae (maggots) show physiological and functional defects leading to the inability to develop into normal adults. When used alone, Nixlo 1.3% EC will result in a reduction in adult fly populations after 3-4 weeks, when previously hatched adult flies have died naturally. If needed, repeat treatments with Nixlo 1.3% EC may be made 14 days after previous treatment, or if heavy rainfall occurs, repeat as necessary.

Nixlo 1.3% EC may be used for control of flying insect pests in, on, and around buildings as previously described in **Product Information**. Nixlo 1.3% EC may be used to control nuisance flies, gnats, midges, and mosquitoes by application into moist breeding areas (potted plants, moist debris, or litter) or into areas holding standing water, such as gutters, drains, pools, and fountains. **Restriction: Do not** apply directly to any natural bodies of water, such as ponds, lakes, streams, rivers, marshes, and estuaries.

#### Treatments in Combination with an Adulticide

For knockdown and more rapid control of adult flying insect pests or to control an influx of flies from untreated areas, use **Nixlo 1.3% EC** in alternation or in a tank-mix combination with an adulticidal insecticide. Combining or alternating **Nixlo 1.3% EC** with insecticides having other modes of action may reduce or prevent the development of genetic resistance to these adulticides.

Tank-mix applications must be made in accordance with those label instructions that are consistent for each product. Prepare the tank mix using the recommended rate of adulticide and Nixlo 1.3% EC by adding the adulticide first and making sure it is well mixed and in suspension, and then adding the correct amount of Nixlo 1.3% EC.

#### Treatments for Flying Insects in, on, and around Livestock and Poultry Housing and Pet Kennels

Nixlo 1.3% EC may be used in livestock housing structures (including poultry houses) and pet kennels to control flying insect pests. Apply as a general surface, fogging/ULV, or a crack and crevice application to areas where flying pests collect or breed. Treat bird cages or stock pens only after removal of animals. Remove animals before applying and do not return animals to treated areas until area treated has completely dried. Restriction: Do not contaminate or apply to food or foodstuffs, water or watering equipment.

For effective management of house fly populations in and around animal facilities, an integrated pest management approach using multiple tactics, including cultural control, biological control, and use of insecticides can be highly effective in managing fly populations. Use of fly baits can complement the effectiveness of Nixlo 1.3% EC and other sprayable insecticides.

For surface applications, treat floors, walls, ceilings, doors, around windows, garbage and refuse areas. When used as directed, Nixlo 1.3% EC will not harm beneficial insects in animal litter or bedding, such as predatory wasps. Control is best when facilities are cleaned, and interior applications are supplemented with exterior perimeter treatments.

#### Treatments to Interior Areas and Surfaces

Apply Nixlo 1.3% EC at the rate of 1 fl oz/1,500 sq ft of surface area or in a volume sufficient to provide adequate coverage. Treat all areas where flying insects may collect, rest, or breed, including vertical walls, ceilings, pipes, conduit, stalls, stanchions, floors, and walkways. When Nixlo 1.3% EC is used alone, treatments can be extended to animal bedding, manure, and other potential areas where flying insects may breed.

## **Outdoor Treatments**

Apply **Nixlo 1.3% EC** as a broadcast, spot, and crack and crevice treatment in a volume sufficient to provide adequate coverage. Use 1-1.5 fl oz of **Nixlo 1.3% EC** per gallon of water. For higher volume, power-spray applications (4-10 gallons/1,000 sq ft), the alternate mixing instructions may be used with 5-15 fl oz **Nixlo 1.3% EC** per 50 gallons of water. Apply to outside surfaces of buildings, walls, window frames, around garbage cans, eaves, cracks and crevices, decks, porches, patios, garages, stagnant water, moist or shaded areas, and other areas where these pests have been seen or found.

For perimeter control, make a general surface application of **Nixlo 1.3**% **EC** at a rate of 1 fl oz/1,500 sq ft or a volume sufficient to provide adequate coverage. To help prevent infestations of buildings by flying insects, treat soil, vegetation, or other substrates in a band 6-10 ft wide adjacent to the building foundations, walls, around doors and windows, and overhead areas where these pests are active and may find entrance or harborage.

#### Use as a Mosquito Larvicide

Apply Nixlo 1.3% EC at the rate of 1-1.5 fl oz/1500 sq ft, using a backpack sprayer, ULV cold fogger, compressed air sprayer or hand-held sprayer. Nixlo 1.3% EC is active only on the immature life stages of mosquitoes. Tank mix or use in conjunction with an adulticide for immediate kill of biting (adult) mosquitoes.

Treat moist shady areas where mosquitoes rest, harbor, or breed, such as trees, shrubs, landscape plants, tall grass or plant foliage, standing water, gutters, drains, under decks, in-ground sprinkler heads, pet areas, fountains, bird baths, landscape timbers, rocks, pavers, planters, and fences.

#### **Restrictions:**

- Do not use in natural holding waters or active waterways.
- · Not for wide area mosquito use: Do not apply using truck-mounted sprayers or aerial application equipment.

# **CONTROL OF LITTER BEETLES**

Nixlo 1.3% EC can be applied to poultry litter in broiler and layer houses infested with darkling, hide, and carrion beetles to break the life cycle of these insect pests. When used as directed, Nixlo 1.3% EC will not harm beneficial insects in animal litter or bedding, such as predatory wasps. Make broadcast or banded applications of Nixlo 1.3% EC to litter at the rate of 1 fl oz/1,500 sq ft space in a volume of water sufficient to provide coverage.

For prevention of beetle larvae in litter, remove animals from the area to be treated and remove old litter. Surface treatments made immediately after animals are removed and again just prior to new animal placement are most effective. Adult egg-laying beetles can be killed with an adulticide. Application of adulticides to walls and floors between flocks and before reintroduction of animals will suppress beetles that escaped earlier treatment and will help delay onset of future infestations. Pay attention to areas where beetles frequently occur, such as walls, supports, cages, stalls, and around feeders. **Restriction: Do not** contaminate food, feed, or water.

Apply Nixlo 1.3% EC uniformly at the rate of 1 fl oz/1,500 sq ft to floor area and to walls, posts, and cage framing (birds grown in cages only). Application should also be made into cracks and crevices around insulation. Reapply after each grow-out or sanitization procedure. Indoor control can be enhanced by making perimeter treatments around the outside of building foundations to prevent migrating adult beetles. Apply Nixlo 1.3% EC and/or other adulticide insecticides in a uniform band at least 1 ft up and 1-4 ft out from foundation. Maintaining a year-round treatment program will prevent background populations from reaching problem levels.



#### **CONTROL OF STORED PRODUCT PESTS**

Nixlo 1.3% EC can be used to control stored product pests when applied as a general surface spray, as a spot treatment, or as a crack and crevice application. Nixlo 1.3% EC may also be applied as a fog or ULV application with water or petroleum distillate as a diluent. For immediate control of adult insects, use Nixlo 1.3% EC as a tank mix with an insecticide registered for control of adult forms of stored product pests. When tank-mixing Nixlo 1.3% EC with adulticides, follow the most restrictive label limitations and precautions of either product in the mix.

# General Surface Applications, Spot Treatments, Crack and Crevice, and ULV/Fogging Applications for Stored Product Pests

For general surface applications, mix 1.5 fl oz **Nixlo 1.3**% **EC** per gallon of water and apply as a diluted spray at a rate of 1 gallon per 1,500 square feet (27 ml/m²). Spray surfaces, into cracks and crevices in walls and floors, under and between pallets, areas at the base of machinery and equipment, under furniture, in mop and equipment closets, behind cabinets, under shelves and racks, around pipes and openings in floors and walls along baseboards, in wall voids, and other areas where insects seek harborage.

For crack-and-crevice applications, mix 1.5 fl oz of **Nixlo 1.3% EC** per gallon of water as a diluted spray solution and apply with a pressurized spray system capable of delivering a pinpoint or variable spray pattern. Crack-and-crevice applications may be made directly to areas such as crevices, baseboards, floors, ceilings, walls, expansion joints, molding, areas around water and sewer pipes, voids where pests can hide and similar areas. Spot treatments may also be made to areas including storage areas, closets, around water pipes, doors and windows, behind and under refrigerators, cabinets, sinks, stoyes and other equipment shelves, drawers and similar areas.

For fogging or ULV applications, Nixlo 1.3% EC may be applied with equipment such as ULV equipment, mechanical misting sprayers, aerosol generators, or thermal foggers. To prepare the fogging solution, follow the equipment manufacturer's solution preparation instructions. For fogging applications, Nixlo 1.3% EC may be diluted with water or petroleum distillate. Apply at a rate of 1.5 fl oz (44.3 ml) of Nixlo 1.3% EC diluted in appropriate carrier per 12.000 cubic feet (340m³).

Fogging applications are recommended for larger facilities including food and nonfood warehouses. Close area to be treated and shut off all ventilation systems. Apply the product in the air and direct fog or mist toward all areas that may harbor target pests. After treatment, leave the room closed for 30 minutes or longer as required by the equipment manufacturer or the labels of other products applied in tank mixing. **Restriction: Do not** remain in treated area. Ventilate the treated area thoroughly before re-entry.

# STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### **CONTAINER HANDLING:**

Nonrefillable container. Do not reuse or refill this container. If empty: Offer for recycling if available or discard in a sanitary landfill. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

For plastic containers ≤ 5 gallons: Nonrefillable Container: Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.

For plastic containers > 5 gallons: Nonrefillable container: Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.

#### LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

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