



## 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:*

Pyriproxyfen: 2-[1-methyl-2-(4-phenoxyphenoxy) ethoxy] pyridine: . . . . . 1.3%

*Other Ingredients\*:* . . . . . 98.7%

*Total:* . . . . . 100.0%

\*Contains petroleum distillates

Archer® Insect Growth Regulator is an emulsifiable concentrate (EC) formulation that contains 0.092 lb of active ingredient per gallon.

**KEEP OUT OF REACH OF CHILDREN. / MANTÉNGASE FUERA DEL ALCANCE DE LOS NIÑOS.**

## CAUTION/PRECAUCIÓN

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 additional precautionary statements and directions for use in booklet.

EPA Reg. No. 100-1111

EPA Est. No. 1021-MN-2

SCP 1111A-L1F 1015

# 1 pint (473 ml)

Net Contents

### FIRST AID / PRIMEROS AUXILIOS

<b>If in eyes</b>	<ul style="list-style-type: none"> <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>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <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>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Do not give <b>any</b> 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>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>

### NOTE TO PHYSICIAN

Contains petroleum distillate – vomiting may cause aspiration pneumonia.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

### HOTLINE NUMBER

For 24-Hour Medical Emergency Assistance (Human or Animal)

Or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call

**1-800-888-8372**

Tenga a la mano el envase o la etiqueta del producto cuando llame a un centro de control de envenenamiento o a un médico, o intente obtener tratamiento. Para más información sobre el tratamiento médico de emergencia, llame al **1-800-888-8372**.

### PRECAUTIONARY STATEMENTS

Hazards to Humans

#### CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin, swallowed, or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. 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.

continued...

## PRECAUTIONARY STATEMENTS (continued)

### 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 use this product in or on electrical equipment due to possibility of shock hazard.

## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

## 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.**

**USE DIRECTIONS ARE ORGANIZED INTO THE FOLLOWING SECTIONS:**

Section 1.0: Product Information

Section 2.0: Use Sites

Section 3.0: Mixing Directions

Section 4.0: Treatments in Food-Handling Establishments

Section 5.0: Application Directions

Section 6.0: Use Directions for Specific Pests

Section 7.0: Resistance Management

## 1.0. PRODUCT INFORMATION

The active ingredient in Archer Insect Growth Regulator 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, Archer Insect Growth Regulator also has activity on adults by affecting the reproductive organs, resulting in a reduction of the reproductive capability of these pests.

Archer Insect Growth Regulator 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. Archer Insect Growth Regulator 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 Archer Insect Growth Regulator provides effective control of listed pests by preventing the development of juvenile pest stages.
- Archer Insect Growth Regulator 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 **Section 7.0** for more information.
- Archer Insect Growth Regulator 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, Archer Insect Growth Regulator retains activity against pre-adult fleas for up to 7 months and pre-adult cockroaches for up to 6 months.
- Archer Insect Growth Regulator reduces egg production in house flies and prevents larval development into adults.

## 1.1. USE RESTRICTIONS

For best results, 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. Archer Insect Growth Regulator 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.
- **Do not** apply Archer Insect Growth Regulator 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.

## 1.2. 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.
- Archer Insect Growth Regulator 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.

## 2.0. USE SITES

**Table 1: Examples of specific areas where Archer Insect Growth Regulator treatments may be made include, but are not limited to, the areas listed below.**

aircraft (cargo areas only)	aircraft (cargo areas only)	garbage cans	rugs
animal quarters	animal quarters	gazebos	schools and child care centers
animal research facilities	animal research facilities	grain storage	ships
apartments	apartments	facilities	soil
attics	attics	grocery stores	storage areas
bakeries	bakeries	homes	stored food areas
barns	barns	hospitals	stored food
bathrooms	bathrooms	hotels	warehouses
basements	basements	indoor eating establishments	stores
bed frames	bed frames	industrial plants	supermarkets
bedrooms	bedrooms	institutions	swine facilities (unoccupied)
bottling facilities	bottling facilities	institutional dining areas	theaters
cabinets	cabinets	jails	tobacco plants and warehouses
cabins	cabins	kennels	townhouses
box springs	box springs	kitchens	trailers
breweries	breweries	landscape plantings	trains
buses	buses	lawns	transport vehicles
cafeterias	cafeterias	livestock housing (unoccupied)	upholstered furniture
candy plants	candy plants	living rooms	utility rooms
cargo holds	cargo holds	locker rooms	veterinaries
carpets	carpets	mattresses	warehouses
casinos	casinos	meat and produce canneries	washrooms
closets	closets	meat processing plant	yards
coffee houses	coffee houses	mess halls	zoos
commercial buildings	commercial buildings	mobile canteens	
condominiums	condominiums	mobile homes	
crawl spaces	crawl spaces	motels	
dairies	dairies	mulch	
decks	decks	nursing homes	
dens	dens	office buildings	
dog houses	dog houses	outdoor eating establishments	
dog kennels	dog kennels	outdoor pet or animal runs or enclosures	
dormitories	dormitories	pantries	
draperies	draperies	patios	
drugstores	drugstores	pet bedding	
egg production facilities	egg production facilities	pet carriers	
factories	factories	pet grooming	
farm buildings	farm buildings	parlors	
feedlots	feedlots	pet living/sleeping area	
floors	floors	pet stores	
flour mills	flour mills	porches	
food-handling areas*	food-handling areas*	poultry houses (unoccupied)	
food-packing plants*	food-packing plants*	prisons	
food-processing plants*	food-processing plants*	public buildings	
food-storage areas*	food-storage areas*	railroad cars	
food warehouses*	food warehouses*	recreation vehicles	
funeral parlors	funeral parlors	restaurants	
garages	garages		

\*See Section 4.0 for special instructions.

### 3.0. MIXING DIRECTIONS

Archer Insect Growth Regulator is an emulsifiable concentrate (EC).

Archer Insect Growth Regulator is intended to be 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 1/2 full with water.
2. Add the amount of Archer Insect Growth Regulator 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-agitate.
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.

#### 3.1. Use Rates for Interior or Exterior Low-Volume Applications:

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

Amount of Archer per gallon of water (% Pyriproxifen in dilution)	Amount of Archer per unit area <sup>1</sup>	
	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

<sup>1</sup> 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.

#### 3.2. Use Rates for Exterior High-Volume Sprays

**Table 3: Mixing Directions for Exterior High-Volume Power Sprays<sup>1</sup>:**

Desired Dilution (% Pyriproxifen in Dilution)	Amount of Archer per volume of finished 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>1</sup> For exterior high-volume applications (power sprays), 4-10 gallons of finished dilution per 1,000 sq ft is suggested.

### 3.3. Treatments in Combination with an Adulticide

Archer Insect Growth Regulator may be combined with other insecticides to enhance control of adult insects, such as Arilon®, Demand®, Demon®, or Tandem® insecticides. 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.

### 4.0. TREATMENTS IN FOOD-HANDLING ESTABLISHMENTS

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

#### 4.1. Applications in Nonfood Areas

Archer Insect Growth Regulator 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).

#### 4.2. Applications in Food Areas

Archer Insect Growth Regulator 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). Archer Insect Growth Regulator 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 should be covered during treatment or thoroughly washed and rinsed with potable water before use.

#### 4.3. Applications in and around Food Warehouses

Archer Insect Growth Regulator 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 may only be treated when empty and may only be used to store tobacco again when treatments have completely dried.

### 5.0. APPLICATION DIRECTIONS

Archer Insect Growth Regulator should 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\*. For area and general surface treatment, follow the rate per unit area\*\* to ensure good coverage.

## 5.1. Use Rates by Pest

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

Pest	*Amount of Archer per gallon water	**Amount of Archer per unit area	Comments
<b>Section 6.1</b> Ants	2 fl oz/gal (0.02%)	2 fl oz/ 1,000 sq ft	Apply to nesting and traveled areas.
<b>Section 6.2</b> Carpet beetles Fleas Ticks <sup>1</sup>	1 fl oz/gal (0.01%)	1 fl oz/ 1,500 sq ft	Increase carrier (water) volume as necessary for penetration of dense materials, e.g., thick carpet and vegetation along exterior walls.
<b>Section 6.3</b> Cockroaches (such as German, Asian, and brown-banded) Crickets	2 fl oz/gal (0.02%)	2 fl oz/ 1,000 sq ft	Increase carrier (water) volume as necessary for good surface wetting (e.g., in mulch) along exterior walls.
<b>Section 6.4</b> Flying insects: Flies Gnats Midges Mosquitoes Moths	1 fl oz/gal (0.01%)  For Fogging/ ULV where allowed: 1.5 fl oz diluted in appropriate carrier	1 fl oz/ 1,500 sq ft  For Fogging/ ULV where allowed: 1.5 fl oz diluted in appropriate carrier per 12,000 cu ft	Wet surfaces used for resting and breeding.
<b>Section 6.5</b> Litter beetles: Carrion beetles <sup>2</sup> Dermestids Darkling beetles Hide beetles <sup>2</sup>	1 fl oz/gal (0.01%)	1 fl oz/ 1,000 sq ft or 1,000 linear ft for crack and crevice	Wet surfaces used for resting and breeding. Increase carrier (water) volume as necessary for penetration of litter and bedding materials.
<b>Section 6.6</b> Stored product pests: Cigarette beetles Confused flour beetles Dermestid beetles Indian meal moth Lesser grain borers Merchant grain beetles Red flour beetles Rice moths Saw-toothed grain beetles Tobacco moths Warehouse beetles	1.5 fl oz/gal (0.01%)	1.5 fl oz/ 1,500 sq ft or 1,000 linear feet for crack-and-crevice  For fogging/ ULV applications where allowed, dilute  1.5 fl oz in an appropriate carrier and apply at a rate of 1.5 fl oz per 12,000 cu ft.	To provide more immediate control of adult insects, use in conjunction with an adulticide.  If application is being made in food areas, read and follow instructions listed in <b>Section 4.0</b> .

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

<sup>1</sup>In CA, only for use on Lone Star ticks

<sup>2</sup>Not approved for use in CA

## 6.0. USE DIRECTIONS FOR SPECIFIC PESTS

### 6.1. CONTROL OF ANTS

#### Indoor Application

Apply Archer Insect Growth Regulator as a general surface, spot, or crack-and-crevice treatment as part of an integrated pest management program. Use Archer Insect Growth Regulator at the rate of 2 fl oz/1000 sq ft to interior areas where ants are foraging. For best results, use Archer Insect Growth Regulator in combination with baits such as Advion Ant Gel Bait or Optigard Ant Gel Bait and/or residual spray treatments such as Arilon, Demand, Demon, or Tandem.

If application is made in a food-handling establishment, see **Section 4.0** for additional instructions.

#### Outdoor Application

Apply Archer Insect Growth Regulator 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. Archer Insect Growth Regulator 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 sq ft), use 5-15 fl oz/50 gallons water. (Refer to mixing table above.)]

### 6.2. CONTROL OF CARPET BEETLES, FLEAS, AND TICKS

Archer Insect Growth Regulator acts on immature stages of carpet beetles, fleas, and ticks to prevent the development of adults. Archer Insect Growth Regulator causes a gradual reduction and elimination of the pest population by breaking the reproductive cycle by stopping the normal development of immature pest stages. Archer Insect Growth Regulator prevents the laying of viable eggs, affects the molting of flea larvae, and blocks normal development into adult fleas. Archer Insect Growth Regulator 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, Archer Insect Growth Regulator can be used alone or mixed with an adulticide, prior to or during the flea and tick season. Application of Archer Insect Growth Regulator 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 Archer Insect Growth Regulator.



## Indoor Applications

Apply dilution of Archer Insect Growth Regulator 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 Archer Insect Growth Regulator may be made 21 days after previous treatment.

## Outdoor Applications

Apply Archer Insect Growth Regulator 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 Archer Insect Growth Regulator 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. Archer Insect Growth Regulator may be combined with flea adulticides, such as Arilon, Demand, Demon, or Tandem. Archer Insect Growth Regulator complements the rapid activity of an adulticide by providing long-term control of immature fleas before they develop into biting adults. This application should conform to use precautions and directions for both products used in a tank mix.

### 6.3. CONTROL OF COCKROACHES AND CRICKETS

Archer Insect Growth Regulator 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 Archer Insect Growth Regulator alone or with an adulticide will result in the development of cockroaches with twisted wings due to the IGR effects of Archer Insect Growth Regulator. When used as directed, Archer Insect Growth Regulator 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 Archer Insect Growth Regulator in combination with cockroach baits, such as Advion Cockroach Gel Bait, and/or sprayable adulticides (such as Arilon, Demand, Demon, and Tandem) 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, such as Arilon, Demand, Demon WP, or Tandem, may be necessary for immediate control. Archer Insect Growth Regulator 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 Archer Insect Growth Regulator at application rates specified above.

## Indoor Applications

Apply dilution of Archer Insect Growth Regulator 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.

If application is made in a food-handling establishment, see instructions in **Section 4.0** of this label.

## Outdoor Applications

Apply a finished dilution of Archer Insect Growth Regulator 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 Archer Insect Growth Regulator may be made 14 days after previous treatment, or if heavy rainfall occurs, repeat as necessary.

If needed, repeat treatments with Archer Insect Growth Regulator may be made 14 days after previous treatment or, if heavy rainfall occurs, repeat as necessary.

### 6.4. CONTROL OF FLYING INSECT PESTS

Apply Archer Insect Growth Regulator 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. Archer Insect Growth Regulator 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, Archer Insect Growth Regulator 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, Archer Insect Growth Regulator 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 Archer Insect Growth Regulator may be made 14 days after previous treatment, or if heavy rainfall occurs, repeat as necessary.

Archer Insect Growth Regulator may be used for control of flying insect pests in, on, and around buildings as previously described in **Section 1.0**. Archer Insect Growth Regulator 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. **Do not** apply directly to any natural bodies of water, such as ponds, lakes, streams, rivers, marshes, and estuaries.

#### 6.4.1. 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 Archer Insect Growth Regulator in alternation or in a tank-mix combination with an adulticidal insecticide, such as Arilon, Demand, Demon, or Tandem insecticides. Combining or alternating Archer Insect Growth Regulator 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 Archer Insect Growth Regulator by adding the adulticide first and making sure it is well mixed and in suspension, and then adding the correct amount of Archer Insect Growth Regulator.

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

Archer Insect Growth Regulator 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. **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 such as Zyrox® Fly Granular Bait can complement the effectiveness of Archer Insect Growth Regulator and other sprayable insecticides.

For surface applications, treat floors, walls, ceilings, doors, around windows, garbage and refuse areas. When used as directed, Archer Insect Growth Regulator will not harm beneficial insects in animal litter or bedding, such as predatory wasps. Control will be enhanced when facilities are cleaned and interior applications are supplemented with exterior perimeter treatments.

#### **6.4.3. Treatments to Interior Areas and Surfaces**

Apply Archer Insect Growth Regulator 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 Archer Insect Growth Regulator is used alone, treatments can be extended to animal bedding, manure, and other potential areas where flying insects may breed.

#### **6.4.4. Outdoor Treatments**

Apply Archer Insect Growth Regulator as a broadcast, spot, and crack-and-crevice treatment in a volume sufficient to provide adequate coverage. Use 1-1.5 fl oz of Archer Insect Growth Regulator 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 Archer Insect Growth Regulator 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 Archer Insect Growth Regulator 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.

#### **6.4.5. Use as a Mosquito Larvicide**

Apply Archer Insect Growth Regulator 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. Archer Insect Growth 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.

- **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.

#### **6.5. CONTROL OF LITTER BEETLES**

Archer Insect Growth Regulator 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, Archer Insect Growth Regulator will not harm beneficial insects in animal litter or bedding, such as predatory wasps. Make broadcast or banded applications of Archer Insect Growth Regulator 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, such as Demand CS. 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. **Do not** contaminate food, feed, or water.

Apply Archer Insect Growth Regulator 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 Archer Insect Growth Regulator or adulticide insecticides or both 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.

#### **6.6. CONTROL OF STORED PRODUCT PESTS**

Archer Insect Growth Regulator 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. Archer Insect Growth Regulator 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 Archer Insect Growth Regulator as a tank mix with an insecticide registered for control of adult forms of stored product pests. When tank-mixing Archer Insect Growth Regulator with adulticides, follow the most restrictive label limitations and precautions of either product in the mix.

##### **6.6.1. 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 Archer Insect Growth Regulator per gallon of water and apply as a diluted spray at a rate of 1 gallon per 1,500 square feet (27 ml/m<sup>2</sup>). 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 Archer Insect Growth Regulator 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, stoves and other equipment shelves, drawers and similar areas.

For fogging or ULV applications, Archer Insect Growth Regulator 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, Archer Insect Growth Regulator may be diluted with water or petroleum distillate. Apply at a rate of 1.5 fl oz (44.3 ml) of Archer Insect Growth Regulator diluted in appropriate carrier per 12,000 cubic feet (340m<sup>3</sup>).

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 recommended by the equipment manufacturer or the labels of other products applied in tank mixing. Do not remain in treated area. Ventilate the treated area thoroughly before re-entry.

## 7.0. RESISTANCE MANAGEMENT

### GROUP 7C INSECTICIDE

Some insect pests have been shown to develop resistance to products used that have been applied repeatedly for control. When this occurs, the labeled dosages fail to control the pest population below threshold levels. As the development of resistance cannot be predicted, the use of Archer Insect Growth Regulator should conform to resistance management strategies established for the intended use site. These strategies may include incorporation of non-chemical control practices, rotation of products with different modes of action on succeeding generations, and targeting the most susceptible life stage of the pest.

**Do not** apply more than three consecutive applications of Archer Insect Growth Regulator before rotating to a product with a different mode of action. Consult your local Syngenta representative or Cooperative Extension Service specialist for the latest information on resistance management in your area.

## STORAGE AND DISPOSAL

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

### Pesticide Storage

Keep this product in its tightly closed original container when not in use. Store in a cool, dry (preferably locked) area that is inaccessible to children and animals.

### Pesticide Disposal

Wastes resulting from the use of this product may be disposed of at an approved waste disposal facility.

### Container Handling

Non-refillable 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. Drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and 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 incineration, or by other procedures approved by state and local authorities.

Archer®, Arilon®, Demand®, Demon®, Tandem®, Zyrox, the ALLIANCE FRAME the SYNGENTA Logo and the PURPOSE ICON are Trademarks of a Syngenta Group Company.

©2015 Syngenta

For non-emergency  
(e.g. current product information), call  
Syngenta Crop Protection at 1-800-334-9481.

Manufactured for:  
Syngenta Crop Protection, LLC  
P.O. Box 18300  
Greensboro, North Carolina 27419-8300

**SCP 1111A-L1F 1015**