Sale, use and distribution of this product in Nassau and Suffolk counties in the state of New York is prohibited.

PULL HERE TO OPEN ►

GROUP 4A INSECTICIDE

Actara®

syngenta®

Insecticide

For control of certain insect pests infesting listed crops

Active Ingredient:	
Thiamethoxam[1]	25.0%
Other Ingredients:	75.0%
Total:	100.0%

[1]CAS No. 153719-23-4

Actara is a water-dispersible granule.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use in booklet.

EPA Reg. No. 100-938 EPA Est. 67545-AZ-1

Product of India
Formulated in the USA

SCP 938A-L2M 1213
4033546

7 pounds, 8 ounces (120 oz)
Net Weight

™

FIRST AID	
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call **1-800-888-8372**	
NOTE TO PHYSICIAN There is no specific antidote if Actara is ingested. Induce emesis or lavage stomach. Treat symptomatically.	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if absorbed through skin, swallowed, or inhaled. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Avoid breathing dust 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 clothing before reuse.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material – Category A (e.g., natural rubber ≥ 14 mils)
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statements

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

continued...

PRECAUTIONARY STATEMENTS *(continued)*

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

This pesticide is toxic to wildlife and highly toxic to aquatic invertebrates.

This pesticide is highly toxic to bees exposed to direct treatment on blooming crops/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds while bees are foraging in/or adjacent to the treatment area.

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift or runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

- **Surface Water Advisory**

  This product may impact surface water quality due to spray drift and runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of thiamethoxam water from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours. (See manual at the following Internet address:

  http://www.wsi.nrcs.usda.gov/products/W2Q/pest/core4.html).

- **Ground Water Advisory**

  Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

- **Spray Drift Advisory**

  Do not allow this product to drift.

Physical or Chemical Hazards

Do not use, pour, spill, or store near heat or open flame.

PROTECTION OF POLLINATORS



APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.

Look for the bee hazard icon  in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

This product can kill bees and other insect pollinators

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- o Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications
- o Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- o Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- o Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at: http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx.

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: www.npic.orst.edu or directly to EPA at: beekill@epa.gov

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 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.

See individual crops for specific pollinator protection application restrictions. If none exist under the specific crop, for foliar applications, follow these application directions for crops that are contracted to have pollinator services or for food/feed crops & commercially grown ornamentals that are attractive to pollinators.



FOR CROPS UNDER CONTRACTED POLLINATION SERVICES

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless the following condition has been met:

If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.



FOR FOOD/FEED CROPS AND COMMERCIALLY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:

- **The application is made to the target site after sunset**
- **The application is made to the target site when temperatures are below 55˚F**
- **The application is made in accordance with a government-initiated public health response**
- **The application is made in accordance with an active state-administered apiary registry program where beekeepers are notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying**
- **The application is made due to an imminent threat of significant crop loss, and a documented determination consistent with an IPM plan or predetermined economic threshold is met. Every effort should be made to notify beekeepers no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.**

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

RESTRICTIONS

- Do not use Actara in nurseries, greenhouses, plant propagation houses, or on any plants grown for use as transplants.
- Do not apply Actara to crops grown from seed treated with thiamethoxam.
- This product is classified as restricted use in New York State.
- Sale, use and distribution of this product in Nassau and Suffolk counties in the state of New York is prohibited.
- In New York State, do not exceed a total of 0.188 lb ai of thiamethoxam containing products per acre per growing season.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material – Category A (e.g., natural rubber ≥ 14 mils)
- Shoes plus socks

FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT CONTROL, AND/OR ILLEGAL RESIDUES.

USE INFORMATION

Actara controls many sucking and chewing insects through contact and ingestion on the crops listed on this label.

- Apply Actara when insect pest populations begin to build, but before populations reach economically damaging levels. Economic thresholds for pests controlled by Actara may be available from your local agricultural authorities.
- Actara is a selective insecticide, and its use is compatible with integrated pest management programs. However, Actara is highly toxic to bees exposed to direct treatment on blooming crops or weeds.
- Actara is rapidly taken up into foliage after application. However, thorough spray coverage is essential for optimal performance. Apply Actara in sufficient water to ensure good coverage. See specific application information in the **Crop Use Directions** section of this label. The use of higher water volumes will generally result in better coverage, especially under adverse conditions (e.g., hot, dry) or where a dense plant canopy exists. The use of a spray adjuvant may improve spray coverage but is not required.
- Actara is rainfast once the spray solution has dried on treated plants.
- Actara may aid in the suppression of some pests. Suppression can mean either inconsistent control (good to poor), or consistent control at a level below that generally considered acceptable for commercial control.
- Actara has a wide margin of plant safety when used in accordance with this label.

Resistance Management

Some insect pests are known to develop resistance to products after repeated use. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies established for the crop and use area. Syngenta encourages responsible product stewardship to ensure effective long-term control of the insects on this label.

Actara contains a Group 4A insecticide (thiamethoxam, belonging to the neonicotinoid class of chemistry). Insect biotypes with acquired or inherent resistance to Group 4A insecticides may eventually dominate the insect population if Group 4A insecticides are used repeatedly as the predominant method of control for targeted species. This may result in partial or total loss of control of those species by Actara or other Group 4A insecticides.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

In order to maintain susceptibility to this class of chemistry:

- Avoid using Group 4A insecticide exclusively for season long control of insect species with more than one generation per crop season.
- For insect species with successive or overlapping generations, apply Actara or other Group 4A insecticides using a "treatment window" approach. A treatment window is a period of time as defined by the stage of crop development and/or the biology of the pests of concern. Within the treatment window, depending on the length of residual activity, there may either be single or consecutive applications (seed treatment, soil, foliar, unless otherwise stated) of the Group 4A insecticides. Do not exceed the maximum Actara allowed per growing season.
- Following a treatment window of Group 4A insecticides, rotate to a treatment window of effective products with a different mode of action before making additional applications of Group 4A insecticide.
- A treatment window rotation, along with other IPM practices for the crop and use area, is considered an effective strategy for preventing or delaying a pest's ability to develop resistance to these classes of chemistry.
- If resistance is suspected, do not reapply Actara or other Group 4A insecticides.

Other Insect Resistance Management (IRM) practices include:

- Incorporating IPM techniques into your insect control program.
- Monitoring treated insect populations for loss of field efficacy.
- Using tank-mixtures or premixes with insecticides from a different target site of action group as long as the involved products are all registered for the same crop outlet and effective rates are applied.

For additional information on Insect Resistance Management:

- Contact your local extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations.
- Visit the Insecticide Resistance Action Committee (IRAC) on the web at http://www.irac-online.org/.

APPLICATION PROCEDURES AND SPRAY EQUIPMENT

Ground Application

Select spray nozzles which will provide accurate and uniform spray deposition. Use spray nozzles which provide medium-sized droplets and reduce drift. To help insure accuracy, calibrate sprayer before each use. For information on spray equipment and calibration, consult nozzle manufacturers and/or State Extension Service specialists.

Apply Actara using sufficient water volume to provide thorough and uniform coverage. In situations where a dense canopy exists and/or pest pressure is high, use greater water volumes. The use of a spray adjuvant may improve spray coverage but is not required. Do not make applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Precautions: (1) When using water volumes of 5-10 gal, fine-sized droplets may be used to improve spray coverage. (2) Select nozzles which produce the desired droplet sizes at the normal rated pressure range. (3) When spraying fine-sized droplets, carefully check ***all*** *nozzles for flow and calibrate the sprayer. (4) The sprayer should travel at a uniform speed across the field. (5) Monitor environmental conditions and follow* ***Recommendations to Avoid Spray Drift*** *carefully.*

Aerial Application

Apply Actara in water, using the minimum spray volume indicated in the **Use Directions** section of this label. Increase spray volume where practical to improve coverage. Avoid making application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Spray Drift Precautions

As with all crop protection products, it is important to avoid off-target movement. Do not allow spray to drift onto adjacent land, crops, or aquatic areas. Follow these recommendations to avoid spray drift:

- Make applications when wind velocity favors on-target product deposition (approximately 3-10 mph). Do not apply when wind velocity exceeds 10 mph. Do not make applications when wind gusts approach 10 mph.
- To reduce the risk of exposure to sensitive aquatic areas, do not make applications when wind direction is toward the aquatic area.
- Do not cultivate or plant crops within 25 ft of the aquatic area as to allow growth of a vegetative filter strip.
- Do not make applications during temperature inversions. Inversions are characterized by stable air and increasing temperatures with increased height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.
- Use the largest droplet size consistent with good pest control. Small droplets are more prone to spray drift, and can be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.
- Apply as close to target plants as practical to obtain a good spray pattern for adequate coverage. Do not make applications more than 10 ft above the crop canopy.
- For aerial applications, mount the spray boom on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length must be used and must not exceed 75% of wing span or rotor diameter.

Application Through Irrigation Systems (Chemigation) - Potatoes and Cranberry Only

Cranberry – Solid Set Sprinkler System Only (See Crop Use Directions)

Actara alone or in combination with other products which are registered for application through sprinkler irrigation may be applied through irrigation systems. Apply this product only through center pivot, solid set, hand move, or moving wheel irrigation systems. Do not apply Actara through any other type of irrigation system. Lack of effectiveness or illegal pesticide residues can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Using Water from Public Water Systems: DO NOT APPLY ACTARA THROUGH ANY IRRIGATION SYSTEM **PHYSICALLY CONNECTED** TO A PUBLIC WATER SYSTEM. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Actara may be applied through irrigation systems, which may be **supplied** by a public water system **only if** the water from the public water system is discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

Any irrigation system using water supplied from a public water system must also meet the following requirements.

Operating Instructions for All Specified Types of Irrigation Systems

1. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.
2. The system must contain a functional check-valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
6. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
7. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
8. Do not apply when wind speed favors drift beyond the area intended.

Calibration and Application Instructions

Actara must be applied under the schedule specified in the specific Crop Use Directions, not according to the irrigation schedule unless the events coincide.

Set the equipment to apply the minimum amount of water per acre. Run the system at 85 - 90% of the manufacturer's maximum rated travel speed.

The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler irrigation equipment. Check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

Center Pivot Irrigation Equipment

Notes: (1) Use only drive systems that provide uniform water distribution. (2) Do not use end guns when chemigating Actara through center pivot systems because of non-uniform application. (3) Plug the first nozzle closest to the well-head to protect the water source.

1. Determine the size of the area to be treated.
2. Determine the time required to apply 0.1 – 0.25 inches of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. Run the system at 80 - 95% of the manufacturer's rated maximum travel speed.
3. Using water, determine the injection pump output when operated at normal line pressure.
4. Determine the amount of Actara, and any tank mix partners, required to treat the area covered by the irrigation system.

5. Add the required amount of Actara, any tank mix partners, and sufficient water to meet the injection time requirements to the solution tank. (See **Mixing Procedures** section of this label.)
6. Make sure the system is fully charged with water before starting injection of the Actara solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
7. Maintain constant agitation in the solution tank during the injection period.
8. Inject the specified amount of Actara per acre continuously for one complete revolution of the system.
9. Stop the injection equipment after treatment is completed. Continue to operate the system until the Actara solution has cleared all of the sprinkler heads.
10. Allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water.

Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

1. Determine the acreage covered by the sprinklers.
2. Fill injector solution tank with plain water and calibrate the flow rate of the system to deliver the contents of the tank over a 20-40 minute time interval.
3. Determine the amount of Actara required to treat the area covered by the irrigation system.
4. Add the required amount of Actara, and any other tank mix partners, into the same quantity of water used to calibrate the injection period. (See **Mixing Procedures** section of this label.)
5. Operate the system at the same pressure and time interval established during the calibration.
6. Inject specified amount of Actara per acre for either a 20-40 minute period at the end of a regular irrigation set, or as a 20-40 minute injection as a separate application not associated with a regular irrigation to maximize retention of the insecticide by the foliage.
7. Stop injection equipment after treatment is completed. Continue to operate the system until the Actara solution has cleared the last sprinkler head. To ensure lines are flushed and free from remaining pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

MIXING PROCEDURES

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean spray equipment before using this product. Vigorous agitation is necessary for proper dispersal of the product. Maintain maximum agitation throughout the spraying operation. Do not let the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area. Keep product container tightly closed when not in use.

Actara Alone

Add 1/2 of the required amount of water to the mix tank. With the agitator running, add the desired amount of Actara to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after Actara has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

Actara + Tank Mixtures

Add 1/2 of the required amount of water to the mix tank. Start the agitator running before adding any tank mix partners. Add tank mix partners in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables) such as Actara, liquid flowables, liquids, emulsifiable concentrates, and surfactants / adjuvants. Always allow each tank mix partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all of the mixture has been applied.

Note: When using Actara in tank mixtures, add all products in water-soluble packaging to the tank before any other tank mix partner, including Actara. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank.

If using Actara in a tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations, which appear on the tank mix product label. Do not exceed any label dosage rate, and follow the most restrictive label precautions and limitations. Do not mix this product with any product which prohibits such mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are labeled.

Compatibility

Actara is compatible with most commonly used pesticides, crop oils, adjuvants, and nutritional sprays. However, since it is not possible to test all possible mixtures, the user should pre-test to assure the physical compatibility and lack of phytotoxic effect of any proposed mixtures with Actara. To determine the physical compatibility of Actara with other products, use a jar test, as described below.

Using a quart jar, add the proportionate amounts of the products to 1 qt of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

The crop safety of all potential tank mixes on all crops has not been tested. Confirm the safety to the target crop before applying any tank mixture not specified on this label.

CROP USE DIRECTIONS



Pollinator Precautions

- Actara is highly toxic to bees exposed to direct treatment on blooming crops/plants or weeds.
  - For **apples,** do not apply Actara after pre-bloom (early pink growth stage) or before post bloom (petal fall growth stage).
  - For **citrus,** do not apply during pre-bloom or during bloom when bees are actively foraging.
  - For **pears,** do not apply Actara after pre-bloom (green cluster stage) or before post bloom (petal fall growth stage).
  - For **stone fruit,** do not apply Actara between the pre-bloom (swollen bud) and post bloom (petal fall) growth stages.
- Do not apply Actara or allow it to drift to blooming crops/plants or weeds if bees are **foraging in/or adjacent to the treatment area.** This is especially critical if there are adjacent orchards that are blooming. (Refer to **Spray Drift Precautions** for additional information).
- **After an Actara application, wait at least 5 days before placing beehives in the treated field.**
- If bees are foraging in the ground cover and it contains any blooming plants or weeds, always remove flowers before making an application. This may be accomplished by mowing, disking, mulching, flailing, or applying a labeled herbicide.
- Consult with your local cooperative extension service or state agency responsible for regulating pesticide use for additional pollinator safety practices.

Crop	Pest	Rate Per Acre Per Application
Barley	Aphids	4.0 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 8.0 oz/Acre (0.125 lb ai/A) of Actara or 0.125 lb ai of thiamethoxam containing products per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels.
- **Pre-Harvest Interval (PHI):** 21 days

- **Minimum interval between applications:** 7 days
- **Water Volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 10 GPA for ground applications or 5 GPA for aerial applications.



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application
Berry and Small Fruit		
Bushberry Subgroup Aronia berry Black current Buffalo currant Chilean guava Edible honeysuckle Elderberry European barberry Gooseberry Highbush blueberry Highbush cranberry Huckleberry Jostaberry Juneberry Native currant Red currant Salal Sea buckthorn Cultivars, varieties and/or hybrids of these	Aphids Cranberry Weevil Leafhoppers	3.0 - 4.0 oz/A
	Japanese Beetle Weevil Adults	4.0 oz/A
Caneberry Subgroup Blackberry Loganberry Raspberry, black and red Wild raspberry Cultivars, varieties and/or hybrids of these	Aphids Leafhoppers	2.0 - 3.0 oz/A
	Japanese Beetle Stinkbugs Tarnished Plant Bug Weevil Adults Whiteflies	3.0 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:**
  Bushberry Subgroup: Do not exceed a total of 12.0 oz/Acre (0.188 lb ai/A) of Actara or 0.188 lb ai of thiamethoxam containing products per acre per growing season.
  Caneberry Subgroup: Do not exceed a total of 6.0 oz/Acre (0.094 lb ai/A) of Actara or 0.094 lb ai of thiamethoxam containing products per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
- **Pre-Harvest Interval (PHI):** 3 days
- **Minimum Interval Between Applications:** 7 days
- **Water Volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 10 GPA for ground applications or 5 GPA for aerial applications.



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application
Berry and Small Fruit		
Low Growing Berry Subgroup (except Cranberry*) Bearberry Bilberry Cloudberry Lingonberry Lowbush Blueberry Muntries Partridgeberry Strawberry ***Note:** Refer to "Cranberry" section for use directions.	Aphids Leafhoppers	1.5 – 3.0 oz/A
	Whiteflies	3.0 – 4.0 oz/A
	Lygus Bug (suppression) Weevil Adult	4.0 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 12.0 oz/Acre (0.188 lb ai/A) of Actara or 0.188 lb ai of thiamethoxam containing products per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
- **Pre-Harvest Interval (PHI):** 3 days
- **Minimum Interval Between Applications:** 10 days
- **Water Volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 50 GPA for ground applications.
- **Do not** apply by air.



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application
Berry and Small Fruit		
Small Fruit Vine Climbing Subgroup (except Fuzzy Kiwi Fruit and Gooseberry*) Amur river grape Grape Kiwi fruit, hardy Maypop Schisandra berry ***Note:** Refer to "Bushberry Subgroup" section for use directions for gooseberry.	Japanese Beetle Leafhoppers Mealybugs Sharpshooters	1.5 - 3.5 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 7.0 oz/Acre (0.109 lb ai/A) of Actara or 0.109 lb ai of foliar applied thiamethoxam containing products per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.

- **Pre-Harvest Interval (PHI):** 5 days
- **Minimum Interval Between Applications:** 14 days
- **Water Volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 10 GPA for ground applications or 5 GPA for aerial applications.



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application
***Brassica* (Cole) Leafy Vegetables**		
Head & Stem *Brassica* Broccoli Broccoli, Chinese Brussels sprouts Cabbage Cabbage, Chinese mustard Cabbage, Chinese (napa) Cauliflower Cavalo broccolo Kohlrabi	Aphids Flea Beetles	1.5 - 3.0 oz/A
	Thrips Whiteflies	3.0 – 5.5 oz/A
Leafy *Brassica* Greens Broccoli, raab Cabbage, Chinese (bok choy) Collards Kale Mizuna Mustard greens Mustard spinach Rape greens	Aphids Flea Beetles	1.5 - 3.0 oz/A
	Thrips Whiteflies	3.0 – 5.5 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 11.0 oz/Acre (0.172 lb ai/A) of Actara or 0.172 lb ai of thiamethoxam containing products per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
- **Pre-Harvest Interval (PHI):**
  0 Days for Head & Stem *Brassica*
  7 Days for Leafy *Brassica* Greens
- **Minimum Interval Between Applications:** 7 days
- **Water Volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 10 GPA for ground applications or 5 GPA for aerial applications. Allow spray to dry prior to harvest.



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application
Citrus Fruit Crop Group including: Calamondin Citrus citron Citrus hybrids (includes chironja, tangelo, & tangor) Grapefruit Kumquat Lemon Lime Mandarin (tangerine) Orange, sour Orange, sweet Pummelo Satsuma mandarin	Aphids Leafhoppers	3.0 – 4.0 oz/A
	Asian Citrus Psyllid Citrus Black Fly Citrus Leafminer Mealybugs Sharpshooters Soft Scales Whiteflies	4.0 – 5.5 oz/A
	Ants (except fire, harvester, carpenter and Pharoah ants) Armored Scales Citrus Root Weevil Adults Crickets Fruit Fly Grasshoppers Katydids Plant Bugs Stink Bugs Thrips (Foliage Feeding)	4.5 – 5.5 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 11.0 oz/Acre (0.172 lb ai/A) of Actara or 0.172 lb ai of thiamethoxam-containing products per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. For scales, time the applications to coincide with the crawler stage. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
- **Pre-Harvest Interval (PHI):** 0 Days
- **Minimum Interval between Applications:** 7 days.
- **Water Volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 10 GPA for ground applications or 5 GPA for aerial applications. Aerial application may result in slower activity and reduced control compared to ground applications.



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application
Cranberry	Aphids Cranberry Flea Beetle Cranberry Weevil Leafhoppers	2.0 - 4.0 oz/A
	Japanese Beetle	4.0 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 12.0 oz/Acre (0.188 lb ai/A) of Actara or 0.188 lb ai of thiamethoxam containing products per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
- **Pre-Harvest Interval (PHI):** 30 days
- **Minimum Interval Between Applications:** 7 days
- **Water Volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 10 GPA for ground applications. Actara may be applied through a solid set sprinkler irrigation system at 200-650 gal total volume /A, and if applied during a regular irrigation set, only at the end of the irrigation set. For best results, it is recommended that 200-300 gal total volume /A be used for irrigation application.
- **Do not** apply by air.
- **Do not** apply to flow-through bogs.
- **Do not** apply within 25 feet of bodies of water.
- **Do not** irrigate for the first 48 hours following application.
- **Do not** release water immediately following application; hold water within the bog system for 5 days following application prior to release.



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application
Cucurbit Vegetables Chayote Chinese waxgourd Citron melon Cucumber Edible gourd Gherkin *Momordica* species Muskmelon Pumpkin Squash: summer and winter Watermelon	Aphids Flea Beetles	1.5 - 3.0 oz/A
	Cucumber Beetles[1] Leafminers[1] Whiteflies	3.0 – 5.5 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 11.0 oz/Acre (0.172 lb ai/A) of Actara or 0.172 lb ai of thiamethoxam containing products per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
- **Pre-Harvest Interval (PHI):** 0 days
- **Minimum Interval Between Applications:** 5 days
- **Water Volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 10 GPA for ground applications or 5 GPA for aerial applications. Allow spray to dry prior to harvest.

[1] Suppression



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application
Fruiting Vegetables Eggplant Ground cherry Pepino Peppers (bell, chili, cooking, pimento, and sweet) Tomatillo Tomato	Aphids Colorado Potato Beetle Flea beetles Leafhoppers	2.0 - 3.0 oz/.A
	Whiteflies Pepper Weevil Stink Bugs	3.0 – 5.5 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 11.0 oz/Acre (0.172 lb ai/A) of Actara or 0.172 lb ai of thiamethoxam containing products per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
- **Pre-Harvest Interval (PHI):** 0 day
- **Minimum Interval Between Applications:** 5 days
- **Water Volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 10 GPA for ground applications or 5 GPA for aerial applications. Allow spray to dry prior to harvest.



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application
Globe Artichoke	Artichoke Aphid - (*Capitophorus elaeagni*) Leafhoppers Proba Bug	3.0 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 6.0 oz/Acre (0.094 lb ai/A) of Actara or 0.094 lb ai of thiamethoxam containing products per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
- **Pre-Harvest Interval (PHI):** 4 days
- **Minimum Interval Between Applications:** 7 days
- **Water Volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 10 GPA for ground applications or 5 GPA for aerial applications.



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application
Leafy Vegetables (except *Brassica*) Amaranth Arugula Cardoon Celery Celery, Chinese Celtuce Chervil Chrysanthemum: edible-leaved & garland Corn Salad Cress: Garden & upland Dandelion Dock Endive Fennel Lettuce: Head & Leaf Orach Parsley Purslane: Garden & Winter Radicchio Rhubarb Spinach (including New Zealand & Vine) Swiss chard	Aphids Flea Beetles Leafhoppers	1.5 - 3.0 oz/A
	Whiteflies	3.0 – 5.5 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 11.0 oz/Acre (0.172 lb ai/A) of Actara or 0.172 lb ai of thiamethoxam containing products per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
- **Pre-Harvest Interval (PHI):** 7 days
- **Minimum Interval Between Applications:** 7 days
- **Water Volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 10 GPA for ground applications or 5 GPA for aerial applications.



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application
Mint: Peppermint Spearmint	Aphids Fleahoppers Leafhoppers Mint Flea Beetles	1.5 - 3.0 oz/A
	Grasshoppers	3.0 - 4.0 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 12.0 oz/Acre (0.188 lb ai/A) of Actara or 0.188 lb ai of thiamethoxam containing products per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
- **Pre-harvest Interval (PHI):** 7 days
- **Minimum Interval Between Applications:** 14 days
- **Water Volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 10 GPA for ground applications or 5 GPA for aerial applications.



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application	Remarks
Pome Fruit Apples Crabapples Loquat Mayhaw Quince	**Prebloom:** Apple Aphid Apple Grain Aphid Green Peach Aphid Leafminers Mullein Bug (*Campylomma* species) Rosy Apple Aphid	4.5 oz/A	Apply before pests reach damaging levels. **Rosy Apple Aphid:** Apply when aphid colonies are first observed at the green tip through pink growth stage before leaf curling occurs. **Leafminers:** Apply when eggs are being deposited.
	Postbloom: Leafhoppers	2.0 – 2.75 oz/A	Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
	Postbloom: Apple Aphid Apple Grain Aphid European Apple Sawfly Green Peach Aphid Leafminers Plum Curculio	4.5 - 5.5 oz/A	Apply before pests reach damaging levels. Apply the higher rate within the listed rate range for heavy infestations. **Leafminers:** To control first generation populations, make application immediately following petal fall. For control of second and third generations, make applications to coincide with egg deposition. Apply the higher rate within the listed rate range for heavy infestations. **Plum Curculio:** Make application immediately following petal fall. Additional applications of a different insecticide may be necessary if pest pressure continues.

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Crop	Pest	Rate Per Acre Per Application	Remarks
Pome Fruit *(continued)* Pear Oriental Pear (*Pyrus pyrifolia*)	**Prebloom:** Pear Psylla	5.5 oz/A	Apply before pests reach damaging levels.
	Prebloom: Apple Aphid	4.5 - 5.5 oz/A	Apply before pests reach damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
	Postbloom: Pear Psylla	5.5 oz/A	Apply before pests reach damaging levels.
	Postbloom: Apple Aphid Comstock Mealybug Plum Curculio	4.5 - 5.5 oz/A	Apply before pests reach damaging levels. Apply the higher rate within the listed rate range for heavy infestations. **Comstock Mealybug:** Make application immediately following petal fall to control first generation crawlers. **Plum Curculio:** Make application immediately following petal fall. Apply the higher rate within the listed rate range for heavy infestations. Additional applications of a different insecticide may be necessary if pest pressure continues.
	Leafhoppers	2.0 - 2.75 oz/A	Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 16.5 oz/Acre (0.258 lb ai/A) of Actara or 0.258 lb ai of thiamethoxam containing products per acre per growing season.
- In New York State, do not exceed 0.172 lb ai/A (11 fl.oz) of Actara or thiamethoxam containing products per acre per growing season on Pome Fruit.
- **Pre-Harvest Interval (PHI):**
  35 day - Use rates exceeding 2.75 oz/A may not be applied closer than 35 days before harvest.
  14 day - Application rates equal to or less than 2.75 oz/A may be applied up to 14 days before harvest.
- **Minimum Interval Between Applications:** 10 days
- **Water volume:** Use a minimum of 50 GPA applied with ground equipment to ensure thorough coverage of foliage.
- **Do not** apply by air.



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application
Root Vegetables Subgroup (Except Sugarbeets)		
Radish	Aphids Flea Beetles Leafhoppers	1.5 - 3.0 oz/A
	Whiteflies	3.0 - 4.0 oz/A
Carrot Celeriac Chicory Edible Burdock Garden Beet Ginseng Horseradish Oriental Radish Parsnip Rutabaga Salsify: Black Salsify Spanish Salsify Skirret Turnip Turnip Rooted Chervil Turnip Rooted Parsley	Aphids Flea Beetles Leafhoppers	1.5 - 3.0 oz/A
	Whiteflies	3.0 - 4.0 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:**
  Radish - Do not exceed a total of 4.0 oz/Acre (0.063 lb ai/A) of Actara or 0.063 lb ai of thiamethoxam containing products per acre per growing season.
  Other Root Vegetables - Do not exceed a total of 8.0 oz/Acre (0.125 lb ai/A) of Actara or 0.125 lb ai of thiamethoxam containing products per acre per growing season
- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
- **Pre-Harvest Interval (PHI):** 7 days
- **Minimum Interval Between Applications:** 7 days
- **Water Volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 10 GPA for ground applications or 5 GPA for aerial applications.



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application
Stone Fruit Apricot Chickasaw plum Damson plum Japanese plum Nectarine Peach Plum Plumcot Prune (fresh) Sweet and tart cherry	Leafhoppers	2.0 - 2.75 oz/A
	Aphids	3.0 - 4.0 oz/A
	Cherry Fruit Fly Plum Curculio Stink Bugs Tarnished Plant Bug Thrips	4.5 - 5.5 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 11.0 oz/Acre (0.172 lb ai/A) of Actara or 0.172 lb ai of thiamethoxam containing products per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
- **Pre-Harvest Interval (PHI):** 14 days
- **Minimum Interval Between Applications:** 7 days
- **Water Volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 50 GPA for ground applications.
- Do not apply by air.



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application
Tobacco	Aphids Flea Beetles Japanese Beetles	2.0 - 3.0 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 3.0 oz/Acre (0.047 lb ai/A) of Actara or 0.047 lb ai of foliar applied thiamethoxam containing products per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
- **Pre-Harvest Interval:** 14 days
- **Water volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 20 GPA for ground applications.



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

Crop	Pest	Rate Per Acre Per Application
Tropical Fruit Avocado Black sapote Canistel Mamey sapote Mango Papaya Sapodilla Star apple	Aphids Leafhoppers Mealybugs Sharpshooters Thrips (Foliage Feeding) Whiteflies	4.0 oz/A

Remarks:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 12.0 oz of Actara or 0.188 lb ai of thiamethoxam containing product per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels.
- **Pre-Harvest Interval (PHI):** 0 days
- **Minimum Interval between Applications:** Allow at least 7 days between applications.
- **Water volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 50 GPA for ground application.



Refer to Pollinator Precautions Section.
Refer to Resistance Management Section.

Crop	Pest	Rate Per Acre Per Application
Tuberous and Corm Vegetables Arracacha Arrowroot Canna Cassava, Bitter and Sweet Chayote (root) Chinese artichoke Chufa Dasheen Ginger Jerusalem artichoke Leren Potato Sweet potato Tanier Turmeric Yams Yam bean	Colorado Potato Beetle Flea Beetle Potato Leafhoppers	1.5 – 3.0 oz/A
	Aphids	3.0 oz/A

Use Restrictions:

- **Maximum Actara Allowed per Growing Season:** Do not exceed a total of 6.0 oz/Acre (0.094 lb ai/A) of Actara or 0.094 lb ai of foliar applied thiamethoxam containing products per acre per growing season.
- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply the higher rate within the listed rate range for heavy infestations.
- **Pre-harvest Interval:** 14 days

continued…

- **Minimum Interval Between Applications:** 7 days
- **Water Volume:** Use sufficient water volume to ensure thorough coverage of foliage. Do not use less than 10 GPA for ground applications or 5 GPA for aerial applications.
- **Chemigation:** use from 0.10-0.25 inches of water. (For more details: see application through irrigation systems for potatoes in **APPLICATION PROCEDURES AND SPRAY EQUIPMENT** section.)



Refer to Pollinator Precautions section.
Refer to Resistance Management section.

ROTATIONAL RESTRICTIONS

Treated areas may be replanted immediately following harvest, or as soon as practical following the last application, with any crop listed on this label or to barley, canola, cotton, corn, cucurbit vegetables, legume vegetables, oilseed crops (rapeseed, Indian rapeseed, Indian mustard seed, field mustard seed, black mustard seed, flax seed, safflower seed, crambe seed and borage seed), sorghum, sunflower and wheat. Any cover crop planted for erosion control or soil improvement may be planted as soon as practical following the last application. However, the cover crop may not be grazed or harvested for food or feed. For all other crops, a 120 - day plant-back interval must be observed.

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a cool, dry place.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used 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 in proper disposal methods.

Container Handling

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. 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 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, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

Actara®, the ALLIANCE FRAME
the SYNGENTA Logo and the PURPOSE ICON
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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 938A-L2M 1213
4033546

Sale, use and distribution of this product in Nassau and Suffolk counties in the state of New York is prohibited.

GROUP 4A INSECTICIDE

Actara®

Insecticide

For control of certain insect pests infesting listed crops

Active Ingredient:	
Thiamethoxam[1]	25.0%
Other Ingredients:	75.0%
Total:	100.0%

[1]CAS No. 153719-23-4

Actara is a water-dispersible granule.

See additional precautionary statements and directions for use in booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-938

EPA Est. 67545-AZ-1

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

SCP 938A-L2M 1213
4033546

7 pounds, 8 ounces (120 ounces)

Net Weight

KEEP OUT OF REACH OF CHILDREN.

CAUTION

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if absorbed through skin, swallowed or inhaled. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Avoid breathing dust 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 clothing before reuse.

FIRST AID

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. **If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice. **If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. **If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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

HOT LINE NUMBER: For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call **1-800-888-8372.**

NOTE TO PHYSICIAN: There is no specific antidote if Actara is ingested. Induce emesis or lavage stomach. Treat symptomatically.

Environmental Hazards: This pesticide is toxic to wildlife and highly toxic to aquatic invertebrates.

This pesticide is highly toxic to bees exposed to direct treatment on blooming crops/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds while bees are foraging in/or adjacent to the treatment area.

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift or runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used 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 in proper disposal methods.

Container Handling: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. 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 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, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

Refer to Surface Water Advisory, Ground Water Advisory, Spray Drift Advisory, and Physical or Chemical Hazards sections in booklet.

Refer to Chemigation statement (potatoes and cranberry only) in booklet.

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