

100-1320

9/19/2008

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Timothy Wilson  
Syngenta Crop Protection, Inc.  
P.O. Box 18300  
Greensboro, NC 27419

SEP 19 2008

Dear Mr. Wilson:

Subject: Labeling Amendment; Revised Rotational Crop Section  
Voliam Xpress Insecticide  
EPA Registration No. 100-1320  
Submission Date: September 3, 2008

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records. Please submit one (1) final printed copy for the above mentioned label before releasing the product for shipment. If you have any questions regarding this label, please contact me at (703) 306-0415.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Kable Bo Davis".

Kable Bo Davis  
Entomologist  
Insecticide-Rodenticide Branch  
Registration Division (7505P)

Enclosure- Stamped Labeling

**RESTRICTED USE PESTICIDE**  
**DUE TO TOXICITY TO FISH AND AQUATIC ORGANISMS**

**FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS, OR PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.**

**VOLIAM Xpress™**  
Insecticide

Group	3	Insecticide
Group	28	Insecticide

For control of listed insect pests infesting various crops

Active Ingredient:	
Lambda-cyhalothrin <sup>1,2</sup>	4.63%
Chlorantraniliprole <sup>3</sup>	9.26%
Other Ingredients:	86.11%
Total:	100.0%

<sup>1</sup>CAS No. 91465-08-6

<sup>2</sup>Synthetic pyrethroid

<sup>3</sup>CAS No. 500008-45-7

Voliam Xpress contains 0.835 lb. of chlorantraniliprole and 0.417 lb. of lambda cyhalothrin-per-gallon.

**KEEP OUT OF REACH OF CHILDREN.**

**WARNING/AVISO**

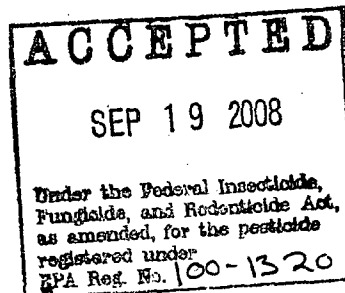
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional precautionary statements and directions for use in booklet.

EPA Reg. No. 100-1320  
EPA Est. XXXX

SCP 1320A-M(draft)

Net Contents



<b>FIRST AID</b>	
<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 any liquid to the person.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<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 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>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<p align="center"><b>HOT LINE NUMBER</b></p> <p align="center">For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call <b>1-800-888-8372</b></p>	

## **PRECAUTIONARY STATEMENTS**

### **Hazards to Humans and Domestic Animals**

#### **WARNING/AVISO**

May be fatal if swallowed. Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

Skin exposure may also result in a sensation described as a tingling, itching, burning, or prickly feeling. Onset may occur immediately to 4 hrs. after exposure and may last 2-30 hours., without damage. Wash exposed areas once with soap and water. Relief from the skin sensation may be obtained by applying an oil-based cream.

### **Personal Protective Equipment (PPE)**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category C on an EPA chemical resistance category selection chart.

#### **Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, Category C, such as barrier laminate; butyl rubber ≥14 mils; nitrile rubber ≥14 mils; neoprene rubber ≥14 mils; polyvinyl chloride (PVC) ≥14 mils; or Viton® ≥ 14 mils
- Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions 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.

### **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.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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## **Environmental Hazards**

This pesticide is extremely toxic to fish and aquatic organisms and toxic to wildlife.

This pesticide is toxic to aquatic invertebrates, oysters and shrimp.

For terrestrial uses: do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

- **Surface Water Advisory**

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. 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 for contamination of water from rainfall runoff (See manual at the following internet address: <http://www.wsi.nrcs.usda.gov/products/W2Q/pest/core4.html>).

Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours.

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- **Ground Water Advisory**

This product has properties and characteristics associated with chemicals detected in ground water. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

- **Spray Drift Advisory**

Do not allow this product to drift.

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## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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**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, Inc. 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.

### SHAKE WELL BEFORE USING.

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.

This labeling must be in the possession of the user at the time of application.

### 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 24 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, Category C, such as barrier laminate; butyl rubber  $\geq 14$  mils; nitrile rubber  $\geq 14$  mils; neoprene rubber  $\geq 14$  mils; polyvinyl chloride (PVC)  $\geq 14$  mils; or Viton<sup>®</sup>  $\geq 14$  mils
- Shoes plus socks

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

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**INFORMATION**

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Voliam Xpress is a broad spectrum foliar insecticide providing both rapid knockdown and long lasting residual control of lepidopteran, sucking and chewing insects. After a foliar application, most of the compound stays on the leaf surface and a small amount penetrates into the leaf tissue. Initial and residual control is contingent upon thorough crop coverage.

For best performance, always follow these directions:

- Voliam Xpress should be applied when insect pest populations begin to build, but before populations reach economically damaging levels. Economic thresholds for pests controlled by Voliam Xpress may be available from your local agricultural authorities.
  - Use of adjuvants is only allowed on certain crops – see specific crop instructions for adjuvants in the **Crop Use Directions** section of this label.
  - Voliam Xpress is highly toxic to bees exposed to direct treatment or to residues on blooming crops and weeds. Do not apply Voliam Xpress or allow it to drift onto blooming plants if bees are foraging in the treated area.
  - Thorough spray coverage is essential for optimal performance. Apply Voliam Xpress 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.
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- Voliam Xpress is rainfast once the spray solution has dried on treated plants.
  - In addition to control of key pests listed on this label, Voliam Xpress may aid in the suppression of other pests. Suppression can mean either inconsistent control (good to poor), or consistent control at a level below that generally considered acceptable for commercial control.
  - Voliam Xpress has a wide margin of plant safety when used in accordance with this label.



## RESTRICTIONS

Do not treat plants grown for transplanting. Not for use in nurseries, plant propagation houses, or greenhouses by commercial transplant producers on plants being grown for transplanting.

- Use this product only in commercial and farm plantings.
- Not for use on ornamental plants or plants being grown for ornamental purposes.
- Not for use in home plantings.

## 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.

Voliam Xpress contains a Group 3 insecticide (Lambda-cyhalothrin, belonging to the pyrethroid class of chemistry) and a Group 28 insecticide (chlorantraniliprole, belonging to the anthranilic diamide class of chemistry). Insect biotypes with acquired or inherent resistance to Group 3 or Group 28 insecticides may eventually dominate the insect population if Group 3 or Group 28 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 Voliam Xpress or other Group 3 or Group 28 insecticides.

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### **In order to maintain susceptibility to this class of chemistry in insect species with high resistance development potential:**

- Avoid using a block of more than two consecutive applications of Voliam Xpress and/or other Group 3 or Group 28 insecticides. (Do not exceed the allowable amount of Voliam Xpress per acre per growing season.)
- Following a block of Group 3 or Group 28 insecticides rotate to a block of applications of effective products with a different mode of action before using additional applications of Group 3 or Group 28 insecticides.
- Using a block rotation, along with other IPM practices, is considered an effective use strategy for preventing or delaying an insect's pest's ability to develop resistance to this class of chemistry.

### **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/>.

**SPRAY DRIFT PRECAUTIONS**

**Observe the Following Precautions When Spraying in the Vicinity of Aquatic Areas Such as Lakes; Reservoirs; Rivers; Permanent Streams, Marshes or Natural Ponds; Estuaries and Commercial Fish Farm Ponds:**

**BUFFER ZONES**

**Vegetative Buffer Strip**

Construct and maintain a minimum 10-foot-wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds).

Only apply products containing Voliam Xpress onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers:

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

*Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA, NRCS. 2000. Fort Worth, Texas. 21 pp.*

**Buffer Zone for Ground Application (groundboom, or airblast)**

Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

**Buffer Zone for Aerial Application**

Do not apply within 150 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

## **SPRAY DRIFT REQUIREMENTS**

### **Wind Direction and Speed**

Only apply this product if the wind direction favors on-target deposition.

Do not apply when the wind velocity exceeds 15 mph.

### **Temperature Inversion**

Do not make aerial or ground applications into temperature inversions.

Inversions are characterized by stable air and increasing temperatures with 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.

### **Droplet Size**

Use only Medium or coarser spray nozzles (for ground and non-ULV aerial application) according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

### **Additional Requirements for Ground Applications**

Wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

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For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

### **Additional Requirements for Aerial Applications**

The spray boom should be mounted on the aircraft as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of the wing span or 80% rotor diameter.

Flight speed and nozzle orientation must be considered in determining droplet size.

Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.

When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

In the State of New York, a 25 ft. vegetated, non-cropped buffer strip untraversed by drainage tiles must be maintained between a treated field and a coastal salt marsh or stream that drains into a coastal salt marsh, for both aerial or ground application. For aerial applications, the 25 ft. vegetated non-cropped buffer strip for runoff protection would be part of the larger 150 ft. buffer strip required for spray drift.

## **TANK MIX APPLICATION**

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean spray equipment before using this product. Maintain agitation throughout the spraying operation. 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.

### **Voliam Xpress Alone**

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

### **Voliam Xpress + Tank Mixtures**

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**When tank mixing with any other agricultural products, always add Voliam Xpress last.** Fill the tank with one half to two thirds volume of the mixing diluent. Start the agitator running before adding any tank mix partners. Make sure all other products are fully dispersed in the mixing diluent before adding the recommended rate of Voliam Xpress to the tank. Add the remainder of the mixing diluent volume. It is recommended that mixing and spray equipment have continuous agitation for best results. Follow the precautions and limitations of the most restricted product in the tank mixture.

In general, tank mix partners should be added in this order: products packaged in water-soluble packaging, wettable powders, wettable granules, dry flowables, 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 the mixture has been applied.

If using Voliam Xpress in a tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations that appear on the tank mix product

label. No label dosage rate should be exceeded, and the most restrictive label precautions and limitations should be followed. Voliam Xpress should not be mixed with any product that 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.

### Adjuvants

Use of adjuvants is only allowed on certain crops – see specific crop instructions for adjuvants in the **Crop Use Directions** section of this label.

When an adjuvant is to be used with this product, the use of an adjuvant that meets the standard of the Chemical Producers and Distributors Association (CPDA) adjuvant certification program is recommended.

Voliam Xpress is an aqueous based formulation. It is recommended that no type of non-emulsifiable oils be used in combination with Voliam Xpress. If adjuvants are used, use the following types:

- Nonionic Surfactant (NIS) containing at least 75% surface agent
- Non-phytotoxic Crop Oil Concentrate (COC), including once refined Vegetable Oil Concentrate (VOC)
- Methylated Sunflower Oils (MSO) containing a minimum of 17% emulsifier.

Adjuvants other than NIS or COC may be used providing the product meets all of the following criteria:

- Contains only EPA exempt ingredients.
- Is non-phytotoxic to the target crop.
- Is compatible in mixture. (May be established through a jar test.)
- Is supported locally for use with Voliam Xpress on the target crop through proven field trials and through university and extension recommendations.

Do not use the following in combination with Voliam Xpress as diluents or adjuvants:

- Non-emulsifiable oils
- Diesel Fuel
- Straight Mineral Oil

### Compatibility (Jar Test)

Voliam Xpress 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 Voliam Xpress. To determine the physical compatibility of Voliam Xpress 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. Before applying any tank mixture not specifically recommended on this label, the safety to the target crop should be confirmed.

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## CROP USE DIRECTIONS

Crop	Pest	Rate Per Acre Per Application
<b>Brassica (Cole) Vegetables</b>		
<b>Head &amp; Stem Brassica</b> Broccoli Broccoli, Chinese Brussels sprouts Cabbage Cabbage, Chinese (napa) Cabbage, Chinese mustard Cauliflower Cavalo broccolo Kohlrabi	Alfalfa Looper Cabbage Looper Cabbage Webworm Cutworms Imported Cabbageworm Southern Cabbageworm	5.0 – 8.0 fl. oz./A
	Aphids <sup>1</sup> Armyworm Beet Armyworm Corn Earworm Diamondback Moth Fall Armyworm Flea Beetles Grasshoppers Japanese Beetle (Adult) Leafhoppers Meadow Spittlebug Plant Bugs Stink Bugs Thrips <sup>1,2</sup> Vegetable Weevil (Adult) Whiteflies <sup>1</sup> Yellowstriped Armyworm	6.0 – 9.0 fl. oz./A

- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply higher rates for heavy infestations.
- **Pre-Harvest Interval (PHI):** 3 Day
- **Maximum Voliam Xpress Allowed per Growing Season:** Do not exceed a total of 31.0 fl. oz. of Voliam Xpress or 0.24 lb. a.i. of lambda-cyhalothrin containing products or 0.2 lb. a.i. of chlorantraniliprole containing foliar products per acre per growing season.
- **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.
- Adjuvants may be used with Voliam Xpress applications to Head and Stem Brassica.

<sup>1</sup>Suppression only

<sup>2</sup>Does not include Western Flower Thrips

**Refer to Resistance Management section.**

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Crop	Pest	Rate Per Acre Per Application
<b>Cucurbit Vegetables</b> Chayote Chinese waxgourd Citron melon Cucumber Edible gourd Gherkin <i>Momordica</i> species Muskmelon Pumpkin Squash: summer and winter Watermelon	Armyworms Blister Beetle Cabbage Looper Corn Earworm Crickets Cucumber Beetles (adults) Cutworms Flea Beetles Grasshoppers June Beetles Leaffooted Bug Leafhoppers Leafminers Lygus Bugs species <sup>1</sup> Melonworm Pickleworm Plant Bugs Rindworm species complex Saltmarsh Caterpillar Squash Beetle Squash Bugs Squash Vine Borers Stink Bugs Thrips <sup>1,2</sup> Tobacco Budworm Webworms	6.0 – 9.0 fl. oz./A
	Aphids <sup>1</sup> Whiteflies <sup>1</sup>	9.0 fl. oz./A

- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply higher rates for heavy infestations.
- **Pre-Harvest Interval (PHI):** 1 Day
- **Maximum Voliam Xpress Allowed per Growing Season:** Do not exceed a total of 31.0 fl. oz. of Voliam Xpress or 0.18 lb. a.i. of lambda-cyhalothrin containing products or 0.2 lb. a.i. of chlorantraniliprole containing foliar products per acre per growing season.
- **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.
- **Do not** use an adjuvant with applications of Voliam Xpress to Cucurbit Vegetables, except on cucumber, Chinese waxgourd, gherkin and *Momordica* species.

<sup>1</sup>Suppression only

<sup>2</sup>Does not include Western Flower Thrips

**Refer to Resistance Management section.**



Crop	Pest	Rate Per Acre Per Application
<b>Fruiting Vegetables</b> Eggplant Groundcherry Pepino Peppers (bell, chili, cooking, pimento, and sweet) Tomatillo Tomato	Cabbage Looper Cutworms Hornworms	5.0 – 8.0 fl. oz./A
	Aphids <sup>1</sup> Armyworm Beet Armyworm Colorado Potato Beetle Corn Earworm Cotton Leafworm Cucumber Beetle (Adults) Diamondback Moth European Corn Borer Fall Armyworm Flea Beetles Grasshoppers Japanese Beetle (Adult) Leafhoppers Leafminers Meadow Spittlebug Melonworm Pepper Weevil (Adult) Plant Bugs Southern Armyworm Stalk Borer Stink Bugs Thrips <sup>1,2</sup> Tobacco Budworm Tomato Fruitworm Tomato Pinworm Tomato Psyllid <sup>1</sup>	6.0 – 9.0 fl. oz./A
	Vegetable Weevil (Adult) Whiteflies <sup>1</sup> Yellowstriped Armyworm	

- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply higher rates for heavy infestations.
- **Pre-Harvest Interval (PHI):** 5 Days
- **Maximum Voliam Xpress Allowed per Growing Season:** Do not exceed a total of 31.0 fl. oz. of Voliam Xpress or 0.36 lb. a.i. of lambda-cyhalothrin containing products or 0.2 lb. a.i. of chlorantraniliprole containing foliar products per acre per growing season.
- **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.
- **Do not** use an adjuvant with applications of Voliam Xpress to chili pepper or pimento.
- Adjuvants may be used with Voliam Xpress applications to eggplant, groundcherry, pepino, bell pepper, cooking pepper, sweet pepper, tomatillo, and tomato.

<sup>1</sup>Suppression only

<sup>2</sup>Does not include Western Flower Thrips

**Refer to Resistance Management section.**

Crop	Pest	Rate Per Acre Per Application
Lettuce: Head & Leaf	Alfalfa Looper Beet Armyworm Cabbage Looper Corn Earworm Green Cloverworm Imported Cabbageworm Saltmarsh Caterpillar	5.0 – 8.0 fl. oz./A
	Aphids <sup>1</sup> Armyworm Cabbage Armyworm Cotton Leafworm Cutworms Diamondback Moth European Corn Borer Fall Armyworm Flea Beetles Grasshoppers Japanese Beetle (Adult) Leafhoppers Leafminers Meadow Spittlebug Plant Bugs Southern Armyworm Stink Bugs Tobacco Budworm Vegetable Weevil (Adult) Whiteflies <sup>1</sup>	6.0 – 9.0 fl. oz./A

- **Application Timing:** Apply before pests reach damaging levels. Scout fields and treat again if populations rebuild to potentially damaging levels. Apply higher rates for heavy infestations.
- **Pre-Harvest Interval (PHI):** 1 Day
- **Maximum Voliam Xpress Allowed per Growing Season:** Do not exceed a total of 31.0 fl. oz. of Voliam Xpress or 0.3 lb. a.i. of lambda-cyhalothrin containing products or 0.2 lb. a.i. of chlorantraniliprole containing foliar products per acre per growing season.
- **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.
- Adjuvants may be used with Voliam Xpress applications to Head and Leaf Lettuce.

<sup>1</sup>Suppression only

Refer to Resistance Management section.

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## ROTATIONAL RESTRICTIONS

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Treated areas may be replanted immediately following harvest or as soon as practical following the last application with any of the crops listed on this label; Cucurbit vegetables, Fruiting vegetables, and Leafy vegetables or to potatoes or cotton. Members of the Root and Tuber vegetables (Crop Group 1) except sugarbeets, and the tops of Root and Tuber vegetables (Crop Group 2) may also be planted immediately following harvest. The following crops may be planted 30 days following the last application of Voliam Xpress: Legume vegetables (Crop Group 6), grass forage fodder and hay (Crop Group 17) alfalfa, alfalfa (grown for seed), barley, buckwheat, corn (popcorn), field corn, seed corn, sweet corn, sorghum, wheat, garlic, okra, onions (bulb), peanuts, rice, wild rice, sugarcane and triticale. 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 rotational crops intended for food or feed, a 12 month plant back interval must be observed.

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## STORAGE AND DISPOSAL

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

### Pesticide Storage

Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area. **DO NOT ALLOW PRODUCT TO FREEZE.**

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### Pesticide Disposal

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

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. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

### Container Disposal

Non-refillable container. Do not reuse or refill this container. Offer for recycling if


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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.

### Residue Removal

Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

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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, Inc.  
P.O. Box 18300  
Greensboro, North Carolina 27419-8300  
[www.syngenta-us.com](http://www.syngenta-us.com)

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(non-detachable container label)

**RESTRICTED USE PESTICIDE  
DUE TO TOXICITY TO FISH AND AQUATIC ORGANISMS**

**FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS, OR PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.**

**VOLIAM Xpress™**  
Insecticide

Group	3	Insecticide
Group	28	Insecticide

For control of listed insect pests infesting various crops

Active Ingredient:	
Lambda-cyhalothrin <sup>1,2</sup>	4.63%
Chlorantraniliprole <sup>3</sup>	9.26%
Other Ingredients:	86.11%
Total:	100.0%

<sup>1</sup>CAS No. 91465-08-6

<sup>2</sup>Synthetic pyrethroid

<sup>3</sup>CAS No. 500008-45-7

Voliam Xpress contains 0.835 lb. of chlorantraniliprole and 0.417 lb. of lambda cyhalothrin per gallon.

**KEEP OUT OF REACH OF CHILDREN.**

**WARNING/AVISO**

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. 100-1320

EPA Est. XXXX

**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.

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Net Contents

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## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

#### WARNING/AVISO

May be fatal if swallowed. Causes moderate eye irritation. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

Skin exposure may also result in a sensation described as a tingling, itching, burning, or prickly feeling. Onset may occur immediately to 4 hrs. after exposure and may last 2-30 hrs., without damage. Wash exposed areas once with soap and water. Relief from the skin sensation may be obtained by applying an oil-based cream.

FIRST AID	
<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 any liquid to the person.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<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 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>
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**

**Environmental Hazards**

This pesticide is extremely toxic to fish and aquatic organisms and toxic to wildlife.

This pesticide is toxic to aquatic invertebrates, oysters and shrimp.

For terrestrial uses: do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

**STORAGE AND DISPOSAL**

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

**Pesticide Storage**

Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area. **DO NOT ALLOW PRODUCT TO FREEZE.**

**Pesticide Disposal**

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

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**Container Disposal**

Non-refillable container. Do not reuse or refill this container. 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.



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**Refer to Surface Water Advisory, Ground Water Advisory, and Spray Drift Advisory and complete Storage and Disposal sections in booklet.**

**Do not apply this product through any type of irrigation system.**

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