

GROUP 3 | 28 INSECTICIDES

VOLIAM XPRESS™

INSECTICIDE

SUSPENSION

COMMERCIAL

For control of listed insect pests infesting corn.

GUARANTEE:

Lambda-cyhalothrin..... 50 g/L

Chlorantraniliprole..... 100 g/L

Contains 1,2-benzisothiazonil-3-one at 0.044% as a preservative.

**READ THE LABEL AND THIS PAMPHLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN**

DANGER



POISON

POTENTIAL SKIN SENSITIZER

REGISTRATION NO: **30325**
PEST CONTROL PRODUCTS ACT

Syngenta Canada Inc.
140 Research Lane, Research Park
Guelph, Ontario
N1G 4Z3
Telephone: 1-877-964-3682

NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

FIRST AID

IF POISONING IS SUSPECTED, IMMEDIATELY contact a doctor or a poison control centre. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

If swallowed, call a poison control centre or doctor **IMMEDIATELY** for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.

If on skin or clothing, take off contaminated clothing. Rinse skin **IMMEDIATELY** with plenty of water for 15–20 minutes. Call a poison control centre 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 centre 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 by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

TOXICOLOGICAL INFORMATION

In case of poisoning, treat symptomatically. This product contains petroleum distillate. Vomiting may cause aspiration pneumonia. In case of exposure to skin of face or other sensitive areas, some individuals may feel a tingling or numbness. This is a transitory effect and does not cause harm to skin.

PRECAUTIONS

1. **KEEP OUT OF REACH OF CHILDREN AND ANIMALS.** Keep unused product in original container tightly closed, locked up and away from food.
2. Fatal or poisonous if swallowed. **DO NOT INGEST.** Avoid contact with eyes, skin, or clothing. Potential skin sensitizer. Wear long-sleeved shirt, long pants and chemical resistant gloves during mixing, loading, applications, clean up and repair. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.
3. **DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. Workers shall be given oral warning of the re-entry interval.

ENVIRONMENTAL HAZARDS

This product is TOXIC to aquatic organisms. Observe buffer zones specified under DIRECTIONS FOR USE. This product contains active ingredients and aromatic petroleum distillates that are TOXIC to aquatic organisms. Observe buffer zones specified under DIRECTIONS FOR USE. Toxic to certain beneficial insects. Minimize spray drift to reduce harmful effects on beneficial insects in habitats next to the application site such as hedgerows and woodland.

This product is toxic to bees when exposed to direct treatment, drift, or residues on flowering crops or weeds. **DO NOT** apply this product to flowering crops or weeds if bees are visiting the treatment area. Minimize spray drift to reduce harmful effects on bees in habitats close to the application site. Spray deposits should be dry before bees commence foraging in treated crop.

Chlorantraniliprole is persistent and may carry over. It is recommended that any products containing chlorantraniliprole not be used in areas treated with this product during the previous season.

The use of this product may result in contamination of groundwater, particularly in areas where soil is permeable (e.g. sandy soil) and/or the depth to the water table is shallow.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, and wetlands), estuarine/marine habitats.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's website at www.croplife.ca.

STORAGE

Store above 0°C in the original container. If solids are present, return to room temperature and agitate until solids are dissolved. Keep in closed container when not in use. Avoid contamination of seed, feed and foodstuffs.

SPILL CLEANUP

Wear appropriate protective equipment when attempting to clean up the spill. If the container is leaking, secure leak and place the container into a drum or heavy gauge plastic bag. Contact Syngenta Canada Inc. (See EMERGENCY NUMBER below) for further information.

For spills and leaks - contain the liquid with dikes of inert material (soil, clay, kitty litter, etc.). Absorb

the spill onto inert material and shovel into a sealable waste container.

On hard surfaces - sprinkle spill area with detergent and scrub in a small quantity of water with a coarse broom. Let stand 10 minutes then absorb onto an inert material and shovel into the waste container. Dispose of all waste, including broom, in accordance with provincial requirements.

On soil - remove the top 15 cm of soil in the spill area and replace with fresh soil. Dispose of all waste in accordance with provincial requirements.

For more information on the disposal of waste and the clean-up of spills, contact the provincial regulatory agency and the manufacturer.

DECONTAMINATION AND DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

CONTAINER DISPOSAL:

Recyclable Container:

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- (1) Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- (2) Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING,
CALL 1-800-327-8633 (FASTMED)***

PRODUCT INFORMATION

VOLIAM XPRESS™ Insecticide is a foliar insecticide providing both rapid knockdown and long lasting residual control of Lepidopteran insects and listed 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.

DIRECTIONS FOR USE

Apply VOLIAM XPRESS Insecticide when listed insect pest populations begin to build, but before populations reach economically damaging levels. Economic thresholds for listed pests controlled by VOLIAM XPRESS Insecticide may be available from your local agricultural authorities.

Thorough spray coverage is essential for optimal performance. Apply VOLIAM XPRESS Insecticide in sufficient water to ensure good coverage (minimum 150 L/ha by ground sprayer). 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.

Control of some insect species with pyrethroid insecticides decreases as temperature rises. For best results, apply VOLIAM XPRESS Insecticide during the early morning before temperatures rise, and during the evening, past the heat of the day.

As this product is not registered for the control of pests in aquatic systems, **DO NOT** use to control aquatic pests.

Optimum application timing for the control of specific listed pest species is best determined by monitoring pest development and populations. In general, VOLIAM XPRESS Insecticide will be most effective against early developmental stages of surface feeding pests and against adults of pests that deposit eggs within plant parts. Follow recommendations provided by local pest monitoring services regarding appropriate application timing for your area. Follow provincial spray calendars for optimum timing of programmed spray applications.

Localized populations of some insect pests have developed resistance to other synthetic pyrethroid insecticides. Consult regional extension specialists regarding the susceptibility of local populations. Follow Integrated Pest Management (IPM) techniques to minimize the need for insecticide applications and ensure that needed applications are timed for optimum effectiveness.

FIELD SPRAYER APPLICATION

DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty.

DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification. Boom height must be 60 cm or less above the crop or ground.

AERIAL APPLICATION

DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty.

DO NOT apply when wind speed is greater than 16 km/h at flying height at the site of application.

DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan.

Generic Aerial Application Label Instructions - Directions for Use

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by

any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Use Precautions for Aerial Application

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual*, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

Operator Precautions for Aerial Application

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

Product Specific Precautions for Aerial Application

Read and understand the entire label before using this product.

For aerial applications, ensure the aircraft is equipped and calibrated to deliver a uniform spray coverage with a minimum potential for drift. To ensure uniform application, use an appropriate marking device. Apply in weather conditions that will not promote drift. Suggested conditions for good aerial application are moderate temperatures (less than 25 °C), moderate relative humidity (greater than 40%), and light winds (3 to 9 kph).

Use only medium or coarse nozzles rated as delivering droplets of volume median diameter of 300 microns or greater. Examples: 6506 flat fan, CP 0.125 deflector nozzle with a low shear deflector angle (30 degrees), D12-56 disc-core.

Apply in a minimum spray volume of 40 litres per hectare. Use water volumes to ensure good coverage for optimum insect control and to minimize drift.

BUFFER ZONES

Use of the following spray methods or equipment **DO NOT** require a buffer zone: hand-held or backpack sprayer and spot treatment.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive freshwater habitats (such as lakes, rivers, sloughs,

ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Method of application	Crop		Buffer Zones (metres) Required for the Protection of:			
			Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:	
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m
Field sprayer	Corn		15	15	15	15
Aerial	Corn	Fixed wing	225	25	800	800
		Rotary wing	200	20	800	700

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

Clean and decontaminate protective clothing and application equipment regularly.

MIXING INSTRUCTIONS

Spray equipment must be clean and free of previous pesticide deposits before applying VOLIAM XPRESS Insecticide. Fill spray tank 1/4 to 1/2 full of water. Add VOLIAM XPRESS Insecticide directly to spray tank. Mix thoroughly to fully disperse the insecticide; once dispersed continued agitation is required. Use mechanical or hydraulic means; do not use air agitation. Spray mix should not be stored overnight in spray tank.

SPRAYER CLEANUP

Prior to application, start with clean, well maintained application equipment. Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove.

Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom and nozzles with clean water. Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment.

Do not clean near wells, water sources or desirable vegetation.

Dispose of waste rinse water in accordance with local regulations.

CROP DIRECTIONS FOR USE

CROPS	CORN (including field, pop and sweet types, and crops grown for seed production)
PEST	European corn borer, corn earworm, western bean cutworm, armyworm
PRODUCT RATE (mL/ha)	500 (25 g ai lambda-cyhalothrin + 50 g ai chlorantraniliprole)
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	<p>Apply no later than when the first feeding is seen on foliage. Reapply after 7 days depending on the presence of significant populations as determined by local monitoring. Where there are two generations of pests, late plantings of sweet corn will require sprays from the late whorl stage until close to harvest. This treatment will not prevent internal cob damage if the insect has penetrated the ear.</p> <p><u>Cutworms:</u> Applications should be made under moist conditions in the evening or night when cutworm activity is highest. Do not disturb the soil surface for 5 days after treatment.</p>
NOTES	<p>Allow a 7 day interval between treatments.</p> <p>DO NOT apply within 1 day of harvest for sweet corn.</p> <p>DO NOT apply within 14 days if the crop is being harvested for silage.</p> <p>DO NOT apply within 21 days for harvest of field corn, pop corn and corn grown for seed.</p> <p>DO NOT apply more than 2 applications per year.</p> <p>Water Volume: <u>Ground Application:</u> Apply in a minimum of 150 L of water per hectare. <u>Aerial Application:</u> Apply in a minimum of 40 L of water per hectare.</p> <p>Do not exceed 225 g chlorantraniliprole per hectare per year (by ground or aerial application), and 69 g lambda-cyhalothrin per hectare per year (by ground application) or 50 g lambda-cyhalothrin per hectare per year (by aerial application), to all types of corn. This includes the use of VOLIAM XPRESS Insecticide as well as additional Group 3 and/or Group 28 insecticides. Consult the label of other products containing these active ingredients prior to treatment to ensure that the annual maximum is not exceeded.</p>

Resistance-Management Recommendations

For resistance management, please note that VOLIAM XPRESS Insecticide contains a Group 3 insecticide (lambda-cyhalothrin) and a Group 28 insecticide (chlorantraniliprole). Any insect population may contain individuals naturally resistant to VOLIAM XPRESS Insecticide and other Group 3 or 28 insecticides. The resistant individuals may dominate the insect population if these groups of insecticides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance:

Where possible, rotate the use of VOLIAM XPRESS Insecticide or other Group 3 or 28 insecticides with different groups that control the same pests in a field.

Make no more than 2 successive applications per generation to the same insect species on a crop. The following application to the target pest(s) must be with an effective product with a different mode of action.

Use tank mixtures with insecticides from a different group when such use is permitted.

Insecticide use should be based on an IPM program that includes scouting, record keeping, and considers cultural, biological and other chemical control practices.

Monitor treated pest populations for resistance development. If resistance is suspected, do not reapply VOLIAM XPRESS Insecticide or other Group 3 or Group 28 insecticides.

Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.

For further information or to report suspected resistance, contact Syngenta Canada Inc. company representatives at 1-877-SYNGENTA (1-877-964-3682) or at www.syngenta.ca.

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