



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

February 16, 2022

Mandy Styles
Registration Manager
Drexel Chemical Company
P.O. Box 13327
Memphis, TN 38113-0327

Subject: Notification per PRN 98-10 – Revise NPIC referral statement and web link under Buffer Zones
Product Name: Drexel L-C Insecticide
EPA Registration Number: 19713-572
Application Date: July 6, 2021; July 13, 2021
Decision Number: 578885; 578886

Dear Mandy Styles:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

If you have any questions, you may contact please contact Elizabeth Andrews at 202-566-2467 or by email at Andrews.Elizabeth@epa.gov.

Sincerely,

A handwritten signature in black ink that reads "Jd Herrick".

Jacquelyn Herrick, Product Manager 03
Invertebrate & Vertebrate Branch 1
Registration Division (7505P)
Office of Pesticide Programs

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.

NOTIFICATION

19713-572

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

02/16/2022

GROUP 3A INSECTICIDE



Drexel®

L- C Insecticide

ACTIVE INGREDIENT:

Lambda-cyhalothrin [1-alpha(S*),3-alpha(Z)]-(±)-cyano (3-phenoxyphenyl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate..... 12.6%

OTHER INGREDIENTS:..... 87.4%

TOTAL: 100.0%

Contains 1.0 pound of active ingredient per gallon. Contains petroleum distillate.

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 **FIRST AID** Below

EPA Reg. No. 19713-572

EPA Est. No. 19713-XX-X

Net Content: _____

FIRST AID

IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Do not give any liquid to the person.
- Do not induce vomiting unless told to by a poison control center or doctor.
- Do not give anything by mouth to an unconscious or convulsing person.

IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 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 further treatment advice.

IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15 to 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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378. You may also call CHEMTREC at 800-424-9300 for emergency medical treatment information.

NOTE TO PHYSICIAN: Contains petroleum distillate - vomiting may cause aspiration pneumonia.

572SP-0721*P

PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals

WARNING: May be fatal if swallowed. Harmful if absorbed through skin or inhaled. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash hands thoroughly with soap and water after handling and before eating, drinking or using tobacco. Wear protective clothing, gloves, eyewear and respirator as indicated under "*PERSONAL PROTECTIVE EQUIPMENT (PPE)*". Remove contaminated clothing and wash 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 hours after exposure and may last 2 to 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 E on an EPA chemical-resistant category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as barrier laminate or nitrile rubber, neoprene rubber or viton ± 14 mils.
- Shoes plus socks
- Protective eyewear

Mixers/loaders supporting aerial applications to Wild rice at the rate of 0.04 lb. a.i. (5.12 fl. ozs.) per acre and treating 1,200 acres (or more) per day must wear: Dust/mist respirator.

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 exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

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: 1) Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

3) 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.

ENVIRONMENTAL HAZARDS

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

PHYSICAL OR CHEMICAL HAZARDS

Combustible liquid. Do not use or store near heat or open flame.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. 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 Protections 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 (REI). 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 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 over long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Protective eyewear

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

USE INFORMATION

Initial and residual controls are contingent upon thorough crop coverage. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air or 10 gallons per acre by ground unless otherwise specified in this label. When foliage is dense or pest pressure is high (heavier insect or egg pressure, larger larval stages), use of higher application volumes and/or higher use rates may improve initial and residual control.

For Cutworm control, this product may be applied before, during or after planting. For soil incorporated applications, use higher rates for improved control.

Resistance: Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state agricultural authorities for details.

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.

RESISTANCE MANAGEMENT

GROUP	3A	INSECTICIDE
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L - C Insecticide is a Group 3A insecticide or acaricide. Insect/mite biotypes with acquired resistance to Group 3A may eventually dominate the insect/mite population if Group 3A insecticides or acaricides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by this product or other Group 3A insecticides or acaricides.

To delay insecticide or acaricide resistance, consider:

- Avoiding the consecutive use of this product or other Group 3A insecticides/acaricides that have similar target site of action on the same insect/mite species.
- Using tank mixtures or premixes with insecticides/acaricides from a different target site action Group as long as the involved products are all registered for the same use and have different sites of action.
- Basing insecticide/acaricide use on a comprehensive IPM program.
- Monitoring treated insect/mite populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for insecticide/acaricide resistance management and/or IPM recommendations for specific site and resistant pest problems.

SPRAY DRIFT MANAGEMENT

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 lambda-cyhalothrin 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 or information on constructing and maintaining effective buffers:

Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA, NRCS. 2000. Fort Worth, Texas. 21 pp. <http://www.in.ces.usda.gov/technical/agronom/newconbuf.pdf>

https://www.nrcs.usda.gov/internet/FSE_DOCUMENTS/nrcs144p2_030970.pdf

Buffer Zone for Ground Application (Groundboom, Overhead chemigation, 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 ULV Aerial Application

Do not apply within 450 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

Buffer Zone for Non-ULV 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.

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

For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the 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 wingtip 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 foot 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 foot vegetated non-cropped buffer strip for runoff protection would be part of the larger 150 foot buffer strip (or 450 ft. buffer strip for ULV application) required for spray drift.

CHEMIGATION

Sprinkler Irrigation Application

Apply this product at rates and timing described elsewhere in this label. Apply with center pivot or continuous-move equipment distributing one-half acre-inch or less during treatment. In general, use the least amount of water required for proper distribution and coverage. If stationary systems (solid sets, handlines or wheel lines other than continuous-move) are used, this product should be injected into no more than the last 20 to 30 minutes of the set. Do not apply when winds are greater than 10 to 15 mph to avoid drift or wind skips. Thorough coverage of foliage is required for good control. Good agitation should be maintained during the entire application period. **Use Precautions — Sprinkler Irrigation Application**

- A. Apply this product only through (sprinkler including center pivot, lateral move, end tow, side [wheel] roll, traveler, big gun, solid set, or hand move) irrigation system(s). Do not apply this product through any other type of irrigation system.
- B. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- C. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- D. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- E. 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.
- F. 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.
- G. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- H. 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.
- I. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- J. 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.

- K. 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.
- L. Do not apply when wind speeds favors drift beyond the area intended for treatment.
- M. Do not apply through chemigation systems connected to public water systems.

APPLICATION DIRECTIONS

Apply this product as shown in the following charts:

ALFALFA / ALFALFA GROWN FOR SEED

Target Pest(s)	Rate Per Acre		Use Directions
	lbs. a.i.	fl. oz.	
Alfalfa caterpillar Army cutworm Cutworm spp. Green cloverworm Leafhopper spp. Looper spp. Three-cornered alfalfa hopper Velvetbean caterpillar Webworm spp.	0.015 to 0.025	1.92 to 3.20	Apply only to fields planted to pure stands of Alfalfa. Apply when pest(s) appears. Apply as required by scouting. Apply by ground or air using sufficient spray volume to obtain full coverage of the foliage. Apply in a minimum of 2 gallons per acre by air or 10 gallons per acre by ground. When foliage is dense and/or pest populations are high, use 5 to 10 gallons per acre by air or 20 gallons per acre by ground and higher labeled rates. Use higher labeled rates for increased residual control.
Alfalfa seed chalcid (Adult) Alfalfa weevil Armyworm Bean leaf beetle (Adult) Blister beetle spp. Blue alfalfa aphid Clover leaf weevil spp. Clover root borer (Adult) Clover root curculio spp. (Adult) Clover stem borer (Adult) Corn earworm Cowpea aphid Cowpea curculio (Adult) Cowpea weevil (Adult) Cucumber beetle spp. (Adult) Egyptian alfalfa weevil Fall armyworm ¹ Grape colaspis (Adult) Grasshopper spp. Green June beetle (Adult) Green peach aphid ² Japanese beetle (Adult) Meadow spittlebug Mexican bean beetle Pea aphid Pea weevil (Adult) Plant bug spp. including Lygus spp. ² Spotted alfalfa aphid Stinkbug spp. Sweet clover weevil (Adult) Thrips spp. ⁴ Western yellow-striped armyworm Whitefringed beetle spp. (Adult) Yellow-striped armyworm	0.02 to 0.03	2.56 to 3.84	Avoid application when bees are actively foraging by applying during the early morning or during the evening hours. Be aware of bee hazard resulting from a cool evening and/or morning dew. It may be advisable to remove bee shelters during and for 2 to 3 days following application to bee shelters. Avoid direct application to bee shelters. RESTRICTIONS: Do not apply more than 0.3 lb. a.i. (3.84 fl. ozs.) per acre per cutting. Do not apply more than 0.12 lb. a.i. (15.36 fl. ozs.) per acre per season. Do not apply within 1 day of harvest for forage or within 7 days of harvest for hay.
Beet armyworm ^{1,2} Blotch leafminer ² Spider mites ³	0.03	3.84	

¹ For control of first and second instars only. ²

See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label.

³ Suppression only.

⁴ Does not include Western flower thrips.

CANOLA

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Armyworm spp. Cabbage seedpod weevil Cutworm spp. Diamondback moth Flea beetle Grasshoppers Looper spp. Lygus bug	0.015 to 0.03	1.92 to 3.84	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 5 or more days. Apply by ground or air using sufficient spray volume to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air.
Cabbage aphid	0.03	3.84	RESTRICTIONS: Do not apply within 7 days of harvest. Do not apply more than 0.09 lb. a.i. (11.52 fl. ozs.) per acre per year.

CEREAL GRAINS

BARLEY, BUCKWHEAT, OATS, RYE, TRITICALE, WHEAT, WHEAT HAY

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Army cutworm Cutworm spp.	0.015 to 0.025	1.92 to 3.20	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 5 or more days.
Armyworm Bird cherry-oat aphid ¹ Cereal leaf beetle English grain aphid ¹ Fall armyworm Flea beetle spp. Grasshopper spp. Hessian fly ² Orange blossom wheat midge Russian wheat aphid ¹ Stinkbug spp. Yellow-striped armyworm	0.02 to 0.03	2.56 to 3.84	Apply by ground or air using sufficient spray volume to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air. Chinch Bug: Repeat applications at 3 to 5 day intervals if needed. This product may only suppress heavy infestations and/or subsequent migrations. Green Bug: Green bug is known to have many biotypes. This product provides suppression only. In this situation, a second application using an alternative chemistry may be needed.
Grass sawfly	0.025 to 0.03	3.2 to 3.84	
Chinch bug Corn leaf aphid ³ Greenbug ^{1,4} Mite spp. ³	0.03	3.84	RESTRICTIONS: Do not apply within 30 days of harvest. Do not allow livestock to graze in treated areas or harvest treated Wheat forage as feed for meat or dairy animals within 7 days after last treatment. Do not feed treated straw to meat or dairy animals within 30 days after the last treatment. Do not apply more than 0.06 lb. a.i. (7.68 fl. ozs.) per acre per season.

¹ Best control is obtained before insects begin to roll leaves. Once Wheat has started to boot, this product may provide suppression only. Higher labeled rates and increased coverage will be necessary. ²

Make applications when adults emerge. ³

Suppression only. ⁴

See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label.

CORN (FIELD, POP, SEED, SWEET) - AT-PLANT APPLICATIONS

Target Pest(s)	Rate Per 1,000 Ft. of Row ²		Use Directions
	lb. a.i.	fl. oz.	
Corn rootworm larvae (Mexican, Northern, Southern, Western) Cutworm spp. Lesser cornstalk borer Red imported fire ant ¹ Seedcorn beetle Seedcorn maggot White grub spp. Wireworm spp. ¹	0.005	0.66	<p>Band Applications: Apply at planting as a 5 to 7 inch T-band sprayed across the open seed furrow between the furrow openers and the press wheels or as a band application behind the press wheel.</p> <p>In-Furrow Applications: Apply into the seed furrow through spray nozzles or microtubes behind the planter furrow openers and in front of the press wheel.</p> <p>Apply a minimum of 3 gallons finished spray per acre.</p> <p>RESTRICTIONS: Do not harvest or graze livestock or cut treated crops for feed within 21 days of at-plant application. Do not apply more than 0.09 lb. a.i. (11.52 fl. ozs.) per acre per crop at plant. For Field corn, Popcorn, and Seed corn do not apply more than 0.12 lb. a.i. (15.36 fl. ozs.) per acre per crop from at-plant and foliar applications. For Sweet corn, do not apply more than 0.48 lb. a.i. (61.44 fl. ozs.) per acre per crop from at plant and foliar applications.</p>

¹ Suppression only.

² Pounds a.i. and fluid ounces of this product per acre applied at 0.66 fluid ounce per 1,000 feet of row for various row spacings:

Row Spacing	40"	38"	36"	34"	32"	30"
Linear foot per acre	13,068	13,756	14,520	15,374	16,335	17,424
Pounds a.i. per acre	0.067	0.07	0.075	0.079	0.084	0.09
This Product (fl. oz./A)	8.6	9.1	9.6	10.1	10.8	11.5

CORN (FIELD, POP, SEED) - FOLIAR APPLICATIONS

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Corn earworm ¹ Cutworm spp. Green cloverworm Meadow spittlebug Western bean cutworm ¹	0.015 to 0.025	1.92 to 3.20	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 7 or more days.

<p>Armyworm² Bean leaf beetle Bird cherry-oat aphid³ Cereal leaf beetle Corn leaf aphid³ Corn rootworm beetle (Mexican, Northern, Southern, Western) (Adult) English grain aphid³ European corn borer¹ Fall armyworm² Flea beetle spp. Grasshopper spp. Hop vine borer¹ Japanese beetle (Adult) Lesser cornstalk borer Sap beetle (Adult) Seedcorn beetle</p>	<p>0.02 to 0.03</p>	<p>2.56 to 3.84</p>	<p>Apply by ground or air using sufficient spray volume to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air.</p> <p>Chinch Bug: For Chinch bug control, begin applications when bugs migrate from small grains on grass weeds to small Corn. Direct spray to the base of the Corn plants. Repeat applications at 3 to 5 day intervals if needed. This product may only suppress heavy infestations and/or subsequent migrations.</p> <p>Corn Rootworm Beetles: For control of adult Corn rootworm beetles (<i>Diabrotica</i> species) as part of an aerial applied Corn rootworm control program, use a minimum of 0.03 lb. a.i. (3.84 fl. ozs.) per acre as part of an aerial applied Corn rootworm control program. RESTRICTIONS:</p>
<p>Southwestern corn borer Stalk borer¹ Stinkbug spp. Tobacco budworm^{1,4} Webworm spp. Yellow-striped armyworm²</p>			<p>Do not allow livestock to graze in treated areas or harvest treated Corn forage as feed for meat or dairy animals within 1 day after last treatment. Do not feed treated Corn fodder or silage to meat or dairy animals within 21 days after last treatment.</p>
<p>Beet Armyworm⁴ Chinch bug Green bug^{3,4} Mexican rice borer Rice stalk borer¹ Southern corn leaf beetle³ Sugarcane borer¹</p>	<p>0.03</p>	<p>3.84</p>	<p>Do not apply within 21 days of harvest. Do not apply more than 0.12 lb. a.i. (15.366 fl. ozs.) per acre per season. Do not apply more than 0.06 lb. a.i. (7.68 fl. ozs.) per acre after silk initiation. Do not apply more than 0.03 lb. a.i. (3.84 fl. ozs.) per acre after Corn has reached the milk stage (yellow kernels with milky fluid).</p>
<p>¹ For control before the larva bores into the plant stalk or ear. ² For control of first and second instars only. ³ Suppression only. ⁴ See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label.</p>			

CORN (SWEET) - FOLIAR APPLICATIONS

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Aphid spp. ^{1,2} Armyworm ³ Aster leafhopper Beet armyworm ^{1,3} Cereal leaf beetle Chinch bug Common cornstalk borer Corn earworm Corn rootworm beetle (Mexican, Northern, Southern, Western) (Adult) Cutworm spp. European corn borer Fall armyworm ³ Flea beetle spp. Grasshopper spp. Japanese beetle (Adult) Sap beetle (Adult) Southern armyworm ³ Southwestern corn borer Spider mite spp. ² Stinkbug spp. Tarnished plant bug Webworm spp. Western bean cutworm Yellow-striped armyworm ³	0.02 to 0.03	2.56 to 3.84	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 4 or more days and before pest enters the stalk or ear. Apply by ground or air using sufficient spray volume to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air. Corn Rootworm Beetles: For control of adult Corn rootworm beetles (<i>Diabrotica</i> species), use a minimum of 0.025 lb. a.i. (3.20 fl. ozs.) per acre as part of an aerial applied Corn rootworm control program. RESTRICTIONS: Do not apply within 1 day of harvest. Do not allow livestock to graze in treated areas or harvest treated Corn forage as feed for meat or dairy animals within 1 day after last treatment. Do not feed treated Corn fodder or silage to meat or dairy animals within 21 days after last treatment. Do not apply more than 0.48 lb. a.i. (61.44 fl. ozs.) per acre per crop from at-plant and foliar applications.
Corn silkfly (Adult) ² Green bug	0.03	3.84	
¹ See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label. ² Suppression only. ³ For control of first and second instars only.			

RICE / WILD RICE

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Bird cherry-oat aphid Chinch bug European Corn borer ¹ Fall armyworm Grasshopper spp. Green bug Leafhopper spp. Mexican rice borer ¹ Rice stalk borer ¹ Rice stink bug Rice water weevil (Adult) Riceworm Sharpshooter spp. Sugarcane borer ¹ True armyworm Yellow sugarcane aphid Yellow-striped armyworm	0.025 to 0.04	3.20 to 5.12	Monitoring of insect populations should be used to determine the timing and frequency of applications. Scout fields at a minimum of 5 day intervals. Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 5 to 7 days. This product can be safely used when propanil products are being used for weed control. Apply by ground or air using sufficient spray volume to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air. Ensure sufficient volume is used to provide adequate coverage. Adding an

<p>European corn borer¹ Mexican rice borer¹ Rice seed midge¹ Rice stalk borer¹ Sugarcane borer¹</p>	<p>0.03 to 0.04</p>	<p>3.84 to 5.12</p>	<p>emulsifiable crop oil (e.g. 1 pt./A) will help improve coverage, reduce evaporation, and efficacy.</p> <p>Personal Protective Equipment (PPE) Requirement: Mixers/loaders supporting aerial applications to Wild rice at the rate of 0.04 lb. a.i. (5.12 fl. ozs.) per acre and treating 1,200 acres (or more) per day must wear dust/mist respirator.</p> <p>Rice Water Weevil: For control of Rice water weevil in dry seeded rice, make a foliar application as indicated by scouting for the presence of adults and/or feeding scars, usually within a time-frame of 0 to 5 days after permanent flood establishment. Do not exceed 10 days from starting permanent flood until insecticide application unless scouting indicates Weevils have not been previously present. Adults may also be treated at later stages of Rice development to reduce overwintering populations.</p> <p>For control of Rice water weevil in water seeded Rice, make the first foliar application after pinpoint flood as indicated by scouting for the presence of adults and/or feeding scars usually when Rice has emerged 0.5 inch above the waterline. Under conditions of prolonged migration into the field, start field scouting for Rice water weevil adults and/or feeding scars 3 to 5 days after the initial treatment and if needed, apply a second application within 7 to 10 days of the first application. Adults may also be treated at later stages of Rice development to reduce overwintering populations.</p> <p>California: In addition to above directions for control of Rice water weevil in water seeded Rice, this product may be applied at the 1 to 3 leaf growth stage, with the majority at the 2 leaf growth stage.</p> <p>Adults are vulnerable on levees and in the water. Larvae are vulnerable while feeding on the leaf prior to entering the soil. Monitor for adults, based upon field history and density of population. Monitor field edges and levee areas for adults. Treat in the following manner: a) spray the inside perimeter of the field, or b) spray the entire field.</p> <p>Green Bug: Green bug is known to have many</p>
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		<p>biotypes. This product may only provide suppression. If satisfactory control is not achieved with the first application of this product, a resistant biotype may be present. Use alternate chemistry for control.</p> <p>Stemborers: For control of Stemborers, scout fields when Rice growth is near panicle differentiation for early damaging populations exhibited as discoloration (orange-tan) around the junction of the leaf sheath and leaf blade which is caused by feeding of the young larvae within the sheath. Applications must be made before larvae bore into the stem. Make the first application at panicle differentiation to 2 inch panicle for partial control. Make the second application at boot to heading for maximum control. All Rice varieties are susceptible to Stemborer damage. Cocodie and Priscilla are particularly susceptible.</p> <p>RESTRICTIONS: Do not release flood water within 7 days after application. Do not apply more than 0.12 lb. a.i. (15.36 fl. ozs.) per acre per season. Do not apply more than 0.08 lb. a.i. (10.24 fl. ozs.) per acre within 28 days of harvest or more than 0.04 lb. a.i. (5.12 fl. ozs.) per acre within 21 days of harvest. Do not apply this product within 21 days of harvest. Do not use treated Rice fields for the aquaculture of edible fish and crustacea. Do not apply as an ultra-low volume (ULV) spray.</p>
<p>¹ For control before the larva bores into the plant stalk.</p>		

SORGHUM (GRAIN)

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Cutworm spp. Sorghum midge	0.015 to 0.025	1.92 to 2.56	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 5 or more days.
Armyworm Beet armyworm ¹ Corn earworm European corn borer ² Fall armyworm ³ Flea beetle spp. Grasshopper spp. Lesser cornstalk borer ² Southwestern corn borer ² Stinkbug spp. Webworm spp. Yellow-striped armyworm ³	0.02 to 0.03	2.56 to 3.84	Apply by ground or air using sufficient spray volume to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air. Sorghum Midge: For Sorghum midge control, begin applications when 25% of the Sorghum heads have emerged and are in tip bloom. Repeat applications at 5 day intervals if needed. Chinch Bug: For Chinch bug control, begin applications when bugs migrate from small grains on grass weeds to small Corn.
Chinch bug Mexican rice borer ² Rice stalk borer ² Sugarcane borer ²	0.03	3.84	Direct spray to the base of the Sorghum plants. Repeat applications at 3 to 5 day intervals if needed. This product may only suppress heavy infestations and/or subsequent migrations. RESTRICTIONS: Do not apply within 30 days of harvest. Do not apply more than 0.08 lb. a.i. (10.24 fl. ozs.) per acre per season. Do not apply more than 0.06 lb. a.i. (7.68 fl. ozs.) per acre per season after crop emergence. Do

			not apply more than 0.02 lb. a.i. (2.56 fl. ozs.) per acre per season once crop is in soft dough stage. Do not graze livestock in treated areas or harvest for fodder, silage or hay.
¹ See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label. ² For control before the larva bores into the plant stalk. ³ For control of first and second instars only.			

COTTON

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Cutworm spp. Soybean thrips Tobacco thrips	0.015 to 0.02	1.92 to 2.56	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 5 to 7 days.
Cabbage looper Cotton fleahopper Cotton leafperforator Cotton leafworm Lygus bug spp. ¹ Pink bollworm Saltmarsh caterpillar	0.02 to 0.03	2.56 to 3.84	Apply by ground or air using sufficient spray volume to obtain full coverage of foliage. Applications may also be made with equipment adapted and calibrated for ULV spray. This product may be mixed with once-refined vegetable oil and applied in a minimum of at least 1 quart of finished spray per acre.
Bandedwing whitefly ^{1,3} Beet armyworm ^{1,2} Boll weevil Brown stink bug Cotton aphid ^{1,3} Cotton bollworm European Corn borer Fall armyworm Green stink bug Southern green stink bug Sweetpotato whitefly ^{1,3} Tobacco budworm ¹ Twospotted spider mite ³	0.025 to 0.04	3.20 to 5.12	<p>Bollworm/Budworm: Under light Bollworm/Budworm infestation levels, 0.02 lb. a.i. (2.56 fl. ozs.) per acre may be applied in conjunction with intense field monitoring.</p> <p>Boll Weevil: For Boll weevil control, spray on a 3 to 5 day schedule.</p> <p><i>Heliothis</i> spp. Eggs: When applied according to label directions for control of Cotton bollworm and Tobacco budworm, this product also provides ovicidal control of unhatched <i>Heliothis</i> spp. eggs.</p> <p>RESTRICTIONS: Do not apply within 21 days of harvest. Do not graze livestock in treated areas. Do not apply more than 0.2 lb. a.i. (25.60 fl. ozs.) per acre per season. Do not make more than 10 synthetic pyrethroid applications (of one product or combination of products) to a Cotton crop in one growing season.</p>
¹ See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label. ² For control of first and second instars only. ³ Suppression only.			

GRASS FORAGE, FODDER, HAY

GRASS, GRASS GROWN FOR HAY OR SILAGE, GRASS GROWN FOR SEED, PASTURE, AND RANGELAND

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Army cutworm Cutworm spp. Essex skipper Range caterpillar Striped grass looper	0.015 to 0.025	1.92 to 3.20	Monitoring of insect populations should be used to determine timing and frequency of applications. Scout fields at a minimum of 5 day intervals. Apply by ground or air using sufficient spray volume to obtain full coverage of the foliage or target area. Apply in minimum of 2 gallons per acre by air.
Beet armyworm Billbug spp. ¹ Bird cherry-oat aphid ² Black grass bug Black turfgrass beetle (Adult) Blue stem midge Cereal leaf beetle Chinch bug Crane fly spp. Cricket spp. English grain aphid ² Fall armyworm Flea beetle spp. Grass mealybug Grass sawfly (Adult) Grasshopper spp. Green June beetle (Adult) Greenbug ^{2,3} Japanese beetle (Adult) Katydid spp. Leafhopper spp. Mites spp. Russian wheat aphid ² Southern armyworm Spittlebug spp. Stinkbug spp. Sugarcane aphid Thrips spp. Ticks spp. True armyworm Webworm spp. Yellow-striped armyworm	0.02 to 0.03	2.56 to 3.84	Chinch Bugs: This product may only suppress heavy infestations and/or migrations. In this situation, a second application using an alternative chemistry may be needed. Green Bug: Green bug is known to have many biotypes. This product may provide suppression only. In this situation, a second application using an alternative chemistry may be needed. Grass Grown For Seed: Straw and mature seed (seed screenings) may be used as feed 7 days after the last application. Pasture and Rangeland Grass: May be used for grazing or cut for forage 0 days after application. Do not cut grass to be dried and harvested for hay until 7 days after the last application. RESTRICTIONS: Do not apply more than 0.03 lb. a.i. (3.84 fl. ozs.) per acre per cutting for pastures, rangeland, and grasses grown for seed. A minimum retreatment interval of 30 days is required for pastures and rangeland receiving 0.03 lb. a.i. per acre which have not been cut between applications. Do not apply more than 0.09 lb. a.i. (11.52 fl. ozs.) per acre per season.
¹ Suppression only. ² Best control is obtained before insects begin to roll leaves. ³ See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label.			

PEANUTS

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Cutworm spp. Green cloverworm Potato leafhopper Red-necked peanut worm Three-cornered alfalfa hopper Velvetbean caterpillar	0.015 to 0.025	1.92 to 3.20	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 7 or more days. Apply by ground or air using sufficient spray volume to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air.
Bean leaf beetle Corn earworm Fall armyworm ¹ Grasshopper spp. Southern corn rootworm (Adult) Stinkbug spp. Tobacco thrips Vegetable weevil (Adult) Whitefringed beetle (Adult)	0.02 to 0.03	2.56 to 3.84	RESTRICTIONS: Do not apply within 14 day of harvest. Do not apply more than 0.12 lb. a.i. (15.36 fl. ozs.) per acre per season. Do not graze livestock in treated area. Do not use treated vines or hay for animal feed.
Aphid spp. Beet armyworm ^{1,2} Lesser Cornstalk borer ³ Soybean looper ^{2,3} Spider mite spp.	0.03	3.84	
¹ Use higher rates for large larvae. ² See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label. ³ Suppression only.			

POME FRUITS - CROP GROUP 11

APPLE, CRABAPPLE, LOQUAT, MAYHAW, ORIENTAL PEAR, PEAR, QUINCE

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Apple aphid Apple maggot (Adult) Cherry fruit fly spp. (Adult) Codling moth Green fruitworm Japanese beetle Leafhopper spp. Leafroller spp. Lesser appleworm Omnivorous leafroller Orange tortrix Oriental fruit moth Pear psylla ¹ Pear sawfly Periodical cicada Plant bug spp. Plum curculio Rosy apple aphid San Jose scale (fruit infestations only) Spirea aphid ¹ Stink bug spp. Tent caterpillar spp. Tentiform leafminer spp. Tree borer Tufted apple budworm Webworm spp.	0.02 to 0.04	2.56 to 5.12	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 5 or more days. Apply by ground or air using sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, apply in a minimum of 5 gallons per acre. RESTRICTIONS: Do not apply within 21 days of harvest. Do not apply more than 0.2 lb. a.i. (25.60 fl. ozs.) per acre per season. Do not apply more than 0.16 lb. a.i. (20.48 fl. ozs.) per acre per year post-bloom.
¹ Suppression only.			

SOYBEANS

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Bean leaf beetle Cabbage looper Corn earworm Corn rootworm beetle (Mexican, Northern, Southern, Western) (Adult) Cutworm spp. Green cloverworm Mexican bean beetle Painted lady (Thistle) caterpillar Potato leafhopper Saltmarsh caterpillar Soybean aphid ¹ Three-cornered alfalfa hopper Thrips spp. ² Velvetbean caterpillar Woollybear caterpillar	0.015 to 0.02	1.92 to 3.20	Make applications when pests appear and repeat applications as necessary, usually at intervals of 5 or more days. Apply by ground or air in sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Adult Corn Rootworm Beetles (<i>Diabrotica</i> species): Use a minimum of 0.02 lb. a.i. (2.56 fl. ozs.) per acre as part of an aerial applied Corn rootworm control program. RESTRICTIONS:

Armyworm ³ Blister beetle (Adult) European corn borer ³ Fall armyworm ³ Grasshopper spp. Japanese beetle (Adult) Plant bug spp. Silverspotted skipper Stinkbug spp. Tobacco budworm ⁴ Webworm spp. Yellow-striped armyworm ⁵	0.025 to 0.03	3.2 to 3.84	Do not apply within 30 days of harvest. Do not apply more than 0.06 lb. a.i. (7.68 fl. ozs.) per acre per season. Do not graze or harvest treated Soybean forage, straw or hay for livestock feed.
Beet armyworm ^{4,5} Lesser cornstalk borer ⁵ Soybean looper ^{4,5} Spider mite spp. ⁵	0.03	3.84	
¹ Use lower rates for early season applications and/or lighter populations. ² Does not include Western flower thrips. ³ Use higher rates for large larvae. ⁴ See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label. ⁵ Suppression only.			

STONE FRUITS - CROP GROUP 12

APRICOT, CHERRY (Sweet, Tart), NECTARINE, PEACH, PLUM (Chickasaw, Damson, Japanese), PLUMCOT, PRUNE

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
American plum borer Apple maggot (Adult) Black cherry aphid Cherry fruit fly spp. (Adult) Codling moth Green fruitworm Japanese beetle June beetle Leafhopper spp. Leafroller spp. Oriental fruit moth Peach twig borer Peachtree borer spp. Pear sawfly Periodical cicada Plant bug spp. Plum curculio Rose chafer Stinkbug spp. Tent caterpillar spp. Thrips spp.	0.02 to 0.04	2.56 to 5.12	<p>Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 5 or more days.</p> <p>Apply by ground or air using sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, apply in a minimum of 5 gallons of water per acre.</p> <p>RESTRICTIONS: Do not apply within 14 days of harvest. Do not apply more than 0.2 lb. a.i. (25.60 fl. ozs.) per acre per year. Do not apply more than 0.16 lb. a.i. (20.48 fl. ozs.) per acre per year post-bloom.</p>

SUGARCANE

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Mexican rice borer ¹ Pygmy mole cricket Rice stalk borer ¹ Sugarcane aphid ² Sugarcane beetle (Adult) ³ Sugarcane borer ¹ West Indian crane fly Yellow sugarcane aphid ²	0.025 to 0.04	3.20 to 5.12	<p>Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 7 or more days.</p> <p>Apply by ground or air using sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, apply a minimum of 2 gallons of water per acre.</p> <p>RESTRICTIONS: Do not apply within 21 days of harvest. Do not apply more than 0.16 lb. a.i. (20.48 fl. ozs.) per acre per season.</p>
<p>¹ For control before the larva bores into the plant stalk.</p> <p>² See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label. ³ Suppression only of Beetles active above ground.</p>			

SUNFLOWER

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Cutworm spp. Sunflower beetle	0.015 to 0.025	1.92 to 3.20	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 5 or more days.
Banded sunflower moth Fall armyworm ¹ Grasshopper spp. Head-clipper weevil (Adult) Japanese beetle (Adult) Leafhopper spp. Meadow spittlebug Painted lady (Thistle) caterpillar Seed weevil (Adult) Spotted cabbage looper Stem weevil (Adult) Stinkbug spp. Sunflower maggot (Adult) Sunflower moth Wollybear caterpillar	0.02 to 0.03	2.56 to 3.84	<p>Apply by ground or air using sufficient spray volume to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air.</p> <p>RESTRICTIONS: Do not apply within 45 days of harvest. Do not apply more than 0.12 lb. a.i. (15.36 fl. ozs.) per acre per season. Do not apply more than 0.09 lb. a.i. (11.52 fl. ozs.) per acre per season after bloom initiation. Do not apply as an ultra low volume (ULV) spray.</p>
Beet armyworm ^{2,3} Spider mite spp. ³	0.03	3.84	
<p>¹ For control of first and second instars only. ² See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label.</p> <p>³ Suppression only.</p>			

TOBACCO

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Aphid spp. ^{1,2} Armyworm spp. ³ Balsam twig aphid Balsam wooly aphid beetle Black pine weevil Blister beetle spp. Cabbage looper Corn earworm Cucumber beetle spp. (Adult) Cutworm spp. European elm leaf Grasshopper spp. Japanese beetle (Adult) Katydid spp. Mealybug spp. Pales weevil Pine conelet bug Pine leaf chermid Pine needle scale Pine tortoise scale Pine weevil spp. Plant bug spp. ¹ Poplar aphid spp. Potato tuberworm Saltmarsh caterpillar Spittlebug spp. Stinkbug spp. Thrips spp. ² Tobacco budworm ² Tobacco flea beetle (Adult) Tobacco hornworm	0.015 to 0.03	1.92 to 3.84	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 7 or more days. Apply by ground or air using sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, apply a minimum of 2 gallons per acre. RESTRICTIONS: Do not apply within 40 days of harvest. Do not apply more than 0.09 lb. a.i. (11.52 fl. ozs.) per acre per season.
Tomato hornworm Tree cricket spp. Vegetable weevil (Adult) Webworm spp.			
¹ See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label. ² Suppression only. ³ For control of first and second instars only.			

TREE NUTS - CROP GROUP 14 AND PISTACHIO

ALMOND, BEECH NUT, BRAZIL NUT, BUTTERNUT, CASHEW, CHESTNUT, CHINQUAPIN, FILBERT (Hazelnut), HICKORY NUT, MACADAMIA NUT (Bush nut), PISTACHIO, WALNUT (Black, English/Persian)

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Ants Chinch bug Codling moth Filbertworm Leafroller spp. Leaf-footed bug Navel orangeworm Peach twig borer Plant bug spp. Stinkbug spp. Walnut aphid Walnut husk fly spp. (Adult)	0.02 to 0.04	2.56 to 5.12	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 5 or more days. Apply by ground or air using sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, apply in a minimum of 5 gallons per acre. RESTRICTIONS: Do not apply within 14 days of harvest. Do not apply more than 0.16 lb. a.i. (20.48 fl. ozs.) per acre per year. Do not apply more than 0.12 lb. a.i. (15.36 fl. ozs.) per acre per year post-bloom.

PECANS

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Hickory shuckworm Pecan aphid spp. Pecan casebearer spp. Pecan <i>phylloxera</i> spp. Pecan spittlebug Pecan weevil spp. Stinkbug spp.	0.02 to 0.04	2.56 to 5.12	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 5 or more days. Apply by ground or air using sufficient water to obtain full coverage of the foliage or target area. When applying by air, apply in a minimum of 5 gallons of water per acre. RESTRICTIONS: Do not apply within 14 days of harvest. Do not apply more than 0.16 lb. a.i. (20.48 fl. ozs.) per acre per year. Do not apply more than 0.12 lb. a.i. (15.36 fl. ozs.) per acre per year post-bloom.

VEGETABLES

COLE CROPS - HEAD AND STEM BRASSICA CROP SUBGROUP 5A

BROCCOLI, BRUSSELS SPROUTS, CABBAGE, CAVALO BROCCOLO, CAULIFLOWER, CHINESE BROCCOLI (GAI LON), CHINESE CABBAGE (NAPA), CHINESE MUSTARD CABBAGE (GAI CHOY), KOHLRABI

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Alfalfa looper Cabbage looper Cabbage webworm Cabbageworm caterpillar Cutworm spp. Green cloverworm Imported cabbageworm Imported saltmarsh Southern cabbageworm	0.015 to 0.025	1.92 to 3.20	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 5 or more days. Apply by ground or air using sufficient spray volume to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air. RESTRICTIONS: Do not apply within 1 day of harvest. Do not apply more than 0.24 lb. a.i. (30.7 fl. ozs.) per acre per season.
Aphid spp. ^{1,2} Armyworm Beet armyworm ^{2,3} Corn earworm Diamondback moth ² European corn borer Fall armyworm Flea beetle spp. Grasshopper spp. Japanese beetle (Adult) Leafhopper spp. Meadow spittlebug Plant bug spp. including Lygus spp. ² Southern armyworm Spider mites spp. ¹ Stinkbug spp. Thrips spp. ¹ Tobacco budworm ² Vegetable weevil (Adult) Whitefly spp. ^{1,2} Yellow-striped armyworm	0.02 to 0.03	2.56 to 3.84	
¹ Suppression only. ² See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label. ³ For control of first and second instars only.			

CUCURBIT VEGETABLES - CROP GROUP 9

CHAYOTE (Fruit); CHINESE WAXGOURD (Chinese Preserving Melon); CITRON MELON; CUCUMBER; GHERKIN; GOURD [(Edible) (*Lagenaria* spp. - Includes: Hyotan, Cucuzza; *Luffa acutangula* - Includes: Hechima, Chinese okra; *Momordica* spp. - Includes: Balsam apple, Balsam pear, Bitter melon, Chinese cucumber)]; MUSKMELON (Hybrids and/or cultivars of *Cucumis melo* - Includes: True cantaloupe, Cantaloupe, Casaba, Crenshaw melon, Golden pershaw melon, Honeydew melon, Honey balls, Mango melon, Persian melon, Pineapple melon, Santa Claus melon, Snake melon); PUMPKIN, SQUASH [(Summer) *Cucurbita pepo* var. *melo* - Includes: Crook neck squash, Straightneck squash, Vegetable marrow, Zucchini]; SQUASH [(Winter) (*Cucurbita maxima*, *Cucurbita moschata* - Includes: Butternut squash, Calabaza, Hubbard squash; *Cucurbita mixta*, *Cucurbita pepo* - Includes: Acorn squash, Spaghetti squash)]; WATERMELON - Includes: Hybrids and/or varieties of *Citrullus lanatus*

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Armyworm spp. ¹ Blister beetle spp. Cabbage looper Corn earworm Cricket spp. Cucumber beetle spp. (Adults) Cutworm spp. Flea beetle spp. Grasshopper spp. June beetle spp. Leaf-footed bug Leafhopper spp. Lygus bug spp. ¹ Melonworm Pickleworm Plant bug spp. Rindworm spp. complex Saltmarsh caterpillar Squash beetle Squash bug spp. Squash vine borer spp. Stinkbug spp. Thrips spp. ^{1,2} Tobacco budworm ¹ Webworm spp.	0.02 to 0.03	2.56 to 3.84	Monitoring of insect populations should be used to determine timing and frequency of applications. Scout fields at a minimum of 5 day intervals. Apply by ground or air using sufficient spray volume to obtain full coverage of foliage. Apply in minimum of 10 gallons per acre by ground and minimum of 2 gallons per acre by air. Insects that bore or tunnel into leaves, vines, stems or fruit must be controlled before penetration. Only exposed insects (larvae and/or adults) can be controlled with foliar applications of this product. RESTRICTIONS: Do not apply within 1 day of harvest. Do not apply more than 0.18 lb. a.i. (23.04 fl. ozs.) per acre per season.
Aphids spp. ¹ Leafminer spp. ^{1,3} Spider mites spp. ³ Whiteflies spp. ^{1,3}	0.03	3.84	
¹ See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label. ² Does not include Western flower thrips. ³ Suppression only.			

FRUITING VEGETABLES (EXCEPT CUCURBITS) - CROP GROUP 8

EGGPLANT, GROUND CHERRY, PEPINO, PEPPERS (Bell, Non-Bell), TOMATILLO, TOMATO

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Cabbage looper Cutworm spp. Hornworm spp.	0.015 to 0.025	1.92 to 3.20	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 5 or more days.

<p>Aphid spp.^{1,2} Beet armyworm^{2,3} Blister beetle spp. Colorado potato beetle² Cucumber beetle spp. (Adult) European corn borer⁴ Fall armyworm³ Flea beetle spp. Grasshopper spp. Japanese beetle (Adult) Leafhopper spp. Leafminer spp.¹ Meadow spittlebug Pepper weevil (Adult)¹ Plant bug Southern armyworm³ Spider mite spp.¹ Stalk borer⁴ Stinkbug spp. Thrips⁵ Tobacco budworm² Tomato fruitworm Tomato pinworm Tomato psylid^{1,2} Vegetable weevil (Adult) Whitefly spp.^{1,2} Yellow-striped armyworm³</p>	<p>0.02 to 0.03</p>	<p>2.56 to 3.84</p>	<p>Apply by ground or air using sufficient spray volume to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air.</p> <p>RESTRICTIONS: Do not apply within 5 days of harvest. Do not apply more than 0.36 lb. a.i. (46.08 fl. ozs.) per acre per season.</p>
<p>¹ Suppression only. ² See resistance statements under "<i>USE INFORMATION</i>" and "<i>RESISTANCE MANAGEMENT</i>" sections of this label. ³ For control of first and second instars only. ⁴ For control before the larva bores into the plant stalk or fruit. ⁵ Does not include Western flower thrips.</p>			

LEGUME VEGETABLES (SUCCULENT OR DRIED) - CROP GROUP 6

BEANS AND PEAS Edible Podded Only: [*Canavalia gladiata* - sword bean, *Canavalia ensiformis* - jackbean, *Glycine max* - Soybean (immature seed)]; **Edible Podded, Succulent Shelled or Dried Shelled:** [*Phaseolus* spp. - includes: Field, Kidney, Lima, Navy, Pinto, Runner, Snap, Tepary and Wax beans; *Vigna* spp. - includes: Adzuki, Asparagus, Moth, Mung, Rice, Urd and Yardlong beans, Black-eyed pea, Catjang, Chinese longbean, Cowpea, Crowder pea, and Southern pea; *Pisum* spp. - includes: Dwarf, Edible-pod, English, Field, Garden, Green, Snow and Sugar snap peas, *Cajanus cajan* (Pigeon pea)]; **Succulent Shelled or Dried Shelled** [*Vicia fava* - Broad bean (favabean)]; **Dried Shelled (Only)** [*Lupinus* spp. - includes: Grain, Sweet, White and Sweet white lupines; *Cicer arietinum* - Chickpea (garbanzo bean); *Cyamopsis tetragonoloba* - Guar; *Lablab purpureus* - Lablab bean (hyacinth bean); *Lens esculata* - Lentils]

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Cutworm spp. Green cloverworm Imported cabbageworm Mexican bean beetle Saltmarsh caterpillar Velvetleaf caterpillar	0.015 to 0.025	1.92 to 3.20	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 5 or more days. Apply by ground or air using sufficient spray volume to obtain full coverage of the foliage. Apply in a minimum of 2 gallons per acre by air.
Alfalfa caterpillar Aphid spp. ¹ Armyworm ² Bean leaf beetle leaf-skeletonizer Blister beetle spp. Corn earworm Corn rootworm beetle spp. (Adult) Cucumber beetle spp. (Adult) Curculio and Weevil spp. ³ (foliage and pod feeding adults and larvae) European corn borer ³ Fall armyworm ² Flea beetle spp. (Adult) Flea hopper spp. Grasshopper spp. Japanese beetle (Adult) Leafhopper spp. Leaf-tier spp. Looper spp. Meadow spittlebug Painted lady butterfly (Larva) Plant bug spp. including <i>Lygus</i> spp. ¹ Stalk borer ³ Stinkbug spp. Three-cornered alfalfa hopper Thrips spp. ¹ Tobacco Budworm ¹ Webworm spp. Western bean cutworm Western yellow-striped armyworm ² Yellow-striped armyworm ²	0.02 to 0.03	2.56 to 3.84	RESTRICTIONS: For Edible podded and Succulent shelled legume vegetables, do not apply within 7 days of harvest. For Dried shelled legume vegetables, do not apply within 21 days of harvest. Do not apply more than 0.12 lb. a.i. (15.36 fl. ozs.) per acre per season. For Succulent and Dried shelled peas and beans, do not graze livestock in treated areas or harvest vines for forage or hay. Do not apply more than 0.12 lb. a.i. (15.36 fl. ozs.) per acre per season. For Succulent and Dried shelled peas and beans, do not graze livestock in treated areas or harvest vines for forage or hay.
Beet armyworm ^{1,4} Leafminer spp. ^{1,4} Lesser cornstalk borer ⁴ Soybean looper ^{1,4} Spider mite spp. ⁴ Whitefly spp. ^{1,4}	0.03	3.84	

¹ See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label.

² For control of the first and second instars only. ³ For control before the larva bores into the plant stalk or pods.

⁴ For suppression only.

LETTUCE (HEAD, LEAF)

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Alfalfa looper Cabbage looper Cabbageworm caterpillar Cutworm spp. Green cloverworm Imported cabbageworm Saltmarsh caterpillar	0.015 to 0.025	1.92 to 3.20	<p>Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 5 or more days.</p> <p>Apply by ground or air using sufficient spray volume to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air.</p> <p>RESTRICTIONS: Do not apply within 1 day of harvest. Do not apply more than 0.30 lb. a.i. (38.40 fl. ozs.) per acre per season.</p>
Aphid spp. ^{1,2} Armyworm Beet armyworm ^{2,3} Corn earworm Diamondback moth ² European corn borer Fall Armyworm Flea beetle spp. Grasshopper spp. Japanese beetle (Adult) Leafhopper spp. Meadow spittlebug Plant bug spp. including Lygus spp. ² Southern armyworm Spider mites spp. ¹ Stinkbug spp. Tobacco budworm ² Vegetable weevil (Adult) Whitefly spp. ^{1,2}	0.02 to 0.03	2.56 to 3.84	
<p>¹ Suppression only. ² See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label. ³ For control of first and second instars only.</p>			

ONIONS (BULB) AND GARLIC

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Cutworm spp. Leafminer spp. (Adult) Onion maggot (Adult) Seedcorn maggot (Adult)	0.015 to 0.025	1.92 to 3.20	<p>Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 5 or more days.</p> <p>Apply by ground or air using sufficient spray volume to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air.</p> <p>Use the higher label rates as Thrips population increases and avoid rescue situations.</p> <p>For Thrips control by aerial application, the addition of 1% COC or 0.25% NIS v/v may enhance the deposition of the spray and increase plant coverage.</p> <p>RESTRICTIONS: Do not apply within 14 days of harvest. Do not apply more than 0.24 lb. a.i. (30.72 fl. ozs.) per acre per season.</p>
Aphid spp. Armyworm spp. ¹ Flower thrips ^{2,3} Onion thrips ³ Plant bug spp. Stinkbug spp. Tobacco thrips Vegetable weevil (Adult) Western flower thrips ^{2,3} Whitefly spp. ^{1,2}	0.02 to 0.03	2.56 to 3.84	

¹ For control of first and second instars only. ² Suppression only.
³ See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label.

TUBEROUS AND CORM VEGETABLES - CROP SUBGROUP 1C

ARRACACHA, ARROWROOT, ARTICHOKE (Chinese, Jerusalem), CANNA (Edible), CASSAVA (Bitter, Sweet), CHAYOTE (Root), CHUFA, DASHEEN, GINGER, LEREN, POTATO, SWEET POTATO, TANIER, TURMERIC, YAM (Bean, True)

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Cutworm spp. Leafhopper spp. Saltmarsh caterpillar Sweet potato hornworm Woollybear caterpillar spp.	0.015 to 0.025	1.92 to 3.20	Make applications when pest(s) appears. Repeat applications as necessary, usually at intervals of 7 or more days.
Aphid spp. ¹ Armyworm spp. ¹ Blister beetle spp. Colorado potato beetle ¹ Corn earworm Cricket spp. Cucumber beetle spp. (Adults) European corn borer Flea beetle spp. (Adults) Grasshopper spp. Looper spp. ¹ Lygus bug spp. ¹ Plant bug spp. Potato psyllid Potato tuberworm Stinkbug spp. Sweet potato leaf beetle (Adults) Sweet potato vine borer Thrips spp. ^{1,2} Tortoise beetle spp. Webworm spp. Weevil spp. (Adults)	0.02 to 0.03	2.56 to 3.84	Apply by ground or air using sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, apply in a minimum of 2 gallons per acre. Insects that bore or tunnel into leaves, vines, stems, tubers or corms must be controlled before penetration. Only exposed insects (larvae and/or adults) can be controlled with foliar applications of this product. RESTRICTIONS: Do not apply within 7 days of harvest. Do not apply more than 0.12 lb. a.i. (15.36 fl. ozs.) per acre per year per season.
Leafminer spp. ^{1,3} Spider mite spp. ³ Whitefly spp. ³	0.03	3.84	
¹ See resistance statements under "USE INFORMATION" and "RESISTANCE MANAGEMENT" sections of this label. ² Does not include Western flower thrips. ³ Suppression only.			

OTHER USES

CONIFERS AND DECIDUOUS TREES PLANTATIONS AND NURSERIES

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Bagworm Balsam twig aphid Balsam wooly aphid Birch leafminer Black pine beetle Elm leaf beetle ¹ European elm bark beetle Gypsy moth Japanese beetle June beetle spp. Leaf beetle spp. Leafroller spp. May beetle spp. Mealybug spp. ¹ Pales weevils Pine chafer Pine colaspis beetle Pine conelet bug Pine leaf chermid Pine needle scales Pine sawfly spp. Pine tip moth spp. Pine tortoise scale Pine weevil spp. Poplar aphid spp. Sawfly spp. Spittlebug spp. Spruce budworm Tent caterpillar spp. Tussock moth spp. Webworm spp.	0.02 to 0.04	2.56 to 5.12	Make applications when pest(s) appears. To control exposed foliage, flower, cone, seed and bark feeding insects, apply as required by scouting. Apply by ground or air using sufficient spray volume to obtain full coverage of target site. When applying by air, apply in a minimum of 2 gallons per acre. RESTRICTIONS: Do not apply more than 0.24 lb. a.i. (30.72 fl. ozs.) per acre per year.
¹ Suppression only.			

SEED ORCHARDS

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
Coneworm spp. Seed bug spp. Thrips spp.	See "Use Directions"	See "Use Directions"	<p>For high volume sprayers, dilute 5.12 fluid ounces per 100 gallons of water and apply 5 to 10 gallons of finished spray per tree.</p> <p>For low volume sprayers, dilute 20 fluid ounces per 100 gallons of water and apply 100 gallons of finished spray per acre.</p> <p>For aerial applications, apply 15 fluid ounces per acre in a minimum of 10 gallons finished spray per acre.</p> <p>RESTRICTIONS: Do not apply more than 0.5 lb. a.i. (64 fl. ozs.) per acre per year.</p>

NON-CROPLAND (Excluding Public Land)

Target Pest(s)	Rate Per Acre		Use Directions
	lb. a.i.	fl. oz.	
See Crop Outlets on this label.	See Crop Outlets	See Crop Outlets	<p>Spray non-cropland adjacent to agricultural areas to control migratory insects, which may threaten crops. Follow use directions, rates and spray directions found elsewhere in this label for the adjacent crop out and target pests.</p> <p>Use highest labeled rates for dense/large foliage, high insect populations and larger larval stages. Repeat as necessary to maintain control.</p> <p>RESTRICTIONS: Do not exceed 0.2 lb. a.i. (25.60 fl. ozs.) per acre per year. Do not graze livestock in treated area.</p>

RATE CONVERSION CHART

Lbs. A.I. Per Acre	Fl. Ozs. per Acre	Pts. Per Acre	Treated Acres Per Gallon
0.015	1.92	0.12	66
0.02	2.56	0.16	50
0.025	3.20	0.20	40
0.03	3.84	0.24	33
0.04	5.12	0.32	25

STORAGE AND DISPOSAL

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

STORAGE: Store in a cool, dry, well ventilated area. Avoid high temperatures. Do not store below 45°F.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. 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.

CONTAINER HANDLING:

Nonrefillable Container (rigid material; less than 5 gallons): Nonrefillable 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 and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

Nonrefillable Container (rigid material; 5 gallons up to < 250 gallons): Nonrefillable 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 one-fourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

Refillable Container (≥ 250 gallons & Bulk): Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, by other procedures approved by State and local authorities.

WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically directed and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

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