

Please read instructions on reverse before completing form. Form Approved. OMB No. 2070-0060. Approval expires 2-28-95

United States <b>Environmental Protection Agency</b> Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number <div style="font-size: 24pt; text-align: center;">213471</div>
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**Application for Pesticide - Section I**

1. Company/Product Number <b>Sandoz Agro, Inc./55947-81</b>	2. EPA Product Manager <b>Phil Hutton</b>	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) <b>Vault WP</b> <b>Sandoz Agro, Inc./ Biological Insecticide</b>	PM# <div style="text-align: center;">90</div>	
5. Name and Address of Applicant (Include ZIP Code)  <input type="checkbox"/> Check if this is a new address		6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____  Product Name _____

**Section - II**

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

**Explanation:** Use additional page(s) if necessary. (For section I and Section II.)  
 Vault WP Biological Insecticide is a B.t. subsp. kurstaki listed in Federal Register notice of May 3, 1995 (Vol. 60, No. 85, p. 21966) as one of the pesticides which qualifies for reduced restricted entry intervals. We are submitting a revised label for Vault in which the REI is reduced to 4 hours from 12. No other changes were made to the label.

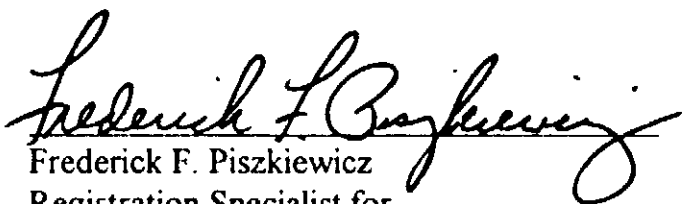
**Section - III**

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	No. per container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions	
6. Manner in Which Label is Affixed to Product			<input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled <input type="checkbox"/> Other _____		


**Section - IV**

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name <b>Frederick F. Piskiewicz</b>	Title <b>Registration Specialist</b>	Telephone No. (Include Area Code) <b>(708) 390-3698</b>
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received <div style="text-align: center; font-size: 18pt;">(Stamped)</div>
2. Signature 	3. Title <b>Registration Specialist</b>	6. Date Application Received <div style="text-align: center; font-size: 18pt;">(Stamped)</div>
4. Typed Name <b>Frederick F. Piskiewicz</b>	5. Date <b>November 27, 1995</b>	

I certify that this notification is complete in accordance with the provisions of EPA's reduced REI policy and that no other changes have been made to the labeling or the confidential statement of formula of this product. I further understand that if this notification does not comply with the terms of EPA's reduced REI policy, this product may be in violation of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA. I understand that the Agency may direct a change in the REI of a product subject to this notice if the Agency determines that a change is appropriate, and that products may be subject to regulatory and enforcement action if the appropriate changes are not made.



Frederick F. Piszkiwicz  
Registration Specialist for  
SANDOZ AGRO, INC.

  
Date

REDUCED REI  
4 HR.  
3 7 22

# VAULT® WP BIOLOGICAL INSECTICIDE

## ACTIVE INGREDIENT:

Bacillus thuringiensis subspecies kurstaki,  
potency of 16,000 International Units  
per milligram \* ..... 3.2%

INERT INGREDIENTS:..... 96.8%

Total..... 100.0%

\* Equivalent to 7.2 billion International Units per lb.  
(8.0 billion Spodoptera units per lb.)

VAULT® is a trademark of Sandoz Ltd.

## CAUTION

### KEEP OUT OF REACH OF CHILDREN

See Side Panel For Additional Precautionary Statements

## STORAGE AND DISPOSAL

**STORAGE:** Store in a cool place. Activity may be impaired by storage at temperatures above 90° F. Do not contaminate water, food, or feed by storage or disposal.

### DISPOSAL:

Pesticide - Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

Container - Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning.

SANDOZ AGRO, INC.  
1300 East Touhy Avenue  
Des Plaines, Illinois 60018

EPA Reg. No. 55947-81

EPA Est. No. 55947-CA-2

# VAULT® WP BIOLOGICAL INSECTICIDE

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS CAUTION

May cause skin and eye irritation and skin sensitization reactions in certain individuals. Avoid contact with skin, eyes, or clothing. Discontinue use if reaction occurs.

## STATEMENT OF PRACTICAL TREATMENT

If on skin: Wash with plenty of water. Get medical attention if irritation persists.

If in eyes: Flush eyes with plenty of water. Get medical attention if irritation persists.

### Personal Protective Equipment:

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

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 controls 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:

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

Do not contaminate water when disposing of equipment washwaters.

## DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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.

## 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 4 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
- Waterproof gloves
- Shoes plus socks

Unless specifically stated, do not apply this product through any type of irrigation system.

**VAULT®** is a biological insecticide specific for the control of lepidopterous larvae (see Recommended Application Rates section).

**VAULT** attacks the larval gut and must be ingested by the insect to be effective.

Since the active ingredient, Bacillus thuringiensis, is exempt from tolerance requirements, **VAULT** may be applied up to and on the day of harvest.

## GENERAL USE INSTRUCTIONS

For most consistent control, apply at first sign of newly hatched worms (first and second instar larvae). Instructions for specific crops are located in the Additional Information Section in the Use Directions.

Reapply as necessary under a pest management program that includes close scouting.

If rapid knockdown of heavy worm or non-lepidopterous populations is necessary, include an effective contact insecticide in combination with **VAULT**.

For heavy worm infestations use the higher **VAULT** rate. During situations of dense foliage and/or rapid growth, increasing water carrier volumes will provide better crop coverage and improve **VAULT** performance.

### Mixing:

Fill spray or mixing tank  $\frac{3}{4}$  full. Turn on agitation and pour **VAULT** into water while maintaining continuous agitation. Add other spray material (if any) and add balance of water. Agitate as necessary to maintain suspension. Do not allow diluted sprays to remain in the tank for more than 48 hours. **VAULT** is formulated to provide desirable coverage and adherence to leaf surfaces. Additional adjuvants, spreaders or stickers may be added to improve product performance, especially under heavy dew or rainy conditions.

Combinations with commonly used insecticides, fungicides or other spray tank adjuvants are generally not deleterious to VAULT if the mix is used promptly. Before mixing in the spray tank, it is advisable to test physical compatibility by mixing all components in a small container in proportionate quantities.

### **GROUND APPLICATION**

Unless otherwise stated, use recommended amount of VAULT in a minimum of 20 gallons of water per acre depending on type of crop and requirements of state regulations.

### **AERIAL APPLICATION**

Use recommended amount of VAULT in at least 3 gallons of water per acre. Applications at higher water volumes have demonstrated improved control of targeted pests. Apply early morning or evening when air is calm.

## RECOMMENDED APPLICATION RATES

### VEGETABLE CROPS

CROP	INSECT	RATE LBS./ACRE	ADDITIONAL INSTRUCTIONS
Artichokes	Artichoke Plume Moth	1-2½	Apply in a minimum of 100 gallons of water per acre with a spray interval of 10 days or less.  Apply 1 lb./acre in combination with ASANA XL, AMBUSH or SUPRACIDE aerially to aid in resistance management of the artichoke plume moth. Use and follow all label directions of the tank mix partner regarding application timing, gallonage and schedules.
Artichokes Asparagus Beans (Green, Lima, Mung) Broccoli Brussel Sprouts Cabbage Cardoon Carrots Cauliflower Celeriac Celery Chick Peas Chinese Broccoli Chinese Cabbage Collards Cucumbers Dry Bulb Onions Eggplants Garlic Green Onions Greens (Dandelion, Turnip, Mustard, Beet, China) Herbs (Basil, Cilantro, Dill, Oregano, Thyme, etc.) Horseradish	Armyworm*	1-3	Repeat as necessary to maintain control  *Use to suppress light populations of small (first to second instar) armyworms.
	Diamondback Moth	1-2½	
	Green Cloverworm	½-1	
	Hornworm	¼-1	
	Imported Cabbageworm	½-1	
	Looper	½-2½	
	Salt Marsh Caterpillar	1-2	
	European Corn Borer	2-3	Also see Biogation
	Tomato pinworm	1½-2½	



Kale  
Kohl Rabi  
Leeks  
Lettuce (Endive,  
Romaine, Head  
Lettuce, Escarole  
Butter Crunch,  
Leaf, etc.)

### RECOMMENDED APPLICATION RATES

#### VEGETABLE CROPS

CROP	INSECT	RATE LBS/ACRE	ADDITIONAL INSTRUCTIONS
Melons (Cantaloupe, Crenshaw, Honeydew, Muskmelon, Watermelon, etc.)			
Okra			
Onions			
Parsley			
Parsnips			
Peas			
Peppers			
Potatoes			
Pumpkins			
Radishes			
Rappini			
Rutabaga			
Salsify			
Spinach			
Squash (Summer and Winter)			
Sweet Corn			
Sweet Potatoes			
Swiss Chard			
Table Beets			
Tomatoes			
Turnip Root			
Watercress			
Yams			

# RECOMMENDED APPLICATION RATES

## FRUIT, NUT, & VINE CROPS

CROP	INSECT	RATE LBS/ACRE	ADDITIONAL INSTRUCTIONS	
Apples and Pears	Fruittree	1-2	Apply when newly hatched larvae appear and before leaves are rolled. Continue applying as a part of the normal cover spray program until pest is adequately controlled.	
	Leafroller			
	Gypsy Moth	1-2		
	Redbanded Leafroller	1-2		
	Tufted Apple Budmoth	1-2		
	Variegated Leafroller	1-2		
	Omnivorous Leafroller	1-2½		
	Tent Caterpillar	1-2		Apply when caterpillars are actively feeding (2nd-4th instars).
	Pandemis Leafroller	1-2		
	Peach Twigborer	2-6		
	Oriental Fruitmoth	2-6		
	Navel Orangeworm	2-6		
	Codling Moth	2-8		
Avocados	Looper	2-2½	Apply as necessary to maintain control.	
	Orange Tortrix	1-2		
	Omnivorous Leafroller	1-2		
	Amorbia	2		Suppression only.
Bananas	Banana Skipper	1-2	Hawaii only. Use calibrated ground equipment with adequate water to apply to point of runoff.	
Citrus	Citrus Cutworm	1-3	Use 50-600 gallons of water per acre when using ground equipment and 10 gallons of water minimum per acre by air.	
	Fruittree Leafroller	1-2		
	Orangedog	½-1		

	Amorbia	2-3	Suppression only.
Blueberries	Blueberry	1-2	Apply by ground equipment only. Begin treatment as soon as possible after hatching. For leafrollers, apply before larvae are protected by leaf folds.
Caneberries	Leafroller		
Currants	Cherry Fruitworm	½-1	
Kiwi	Fruittree	1-2	
	Leafroller		
	Gypsy Moth	1-2	
	Green Fruitworm	½-1	
	Looper	1-2	
	Orange Tortrix	1-2	
	Omnivorous	1-2	
	Leafroller		
	Blueberry Spanworm	1-2	

## RECOMMENDED APPLICATION RATES

### FRUIT, NUT, & VINE CROPS

CROP	INSECT	RATE LBS/ACRE	ADDITIONAL INSTRUCTIONS
Grapes	Grape Leafroller	1-2 ½	Apply by ground equipment in up to 200 gallons total spray per acre to obtain thorough coverage of leaf surfaces. Start treating as soon as possible after hatching and before larvae are protected by leaf folds.
	Grapeleaf Skeletonizer	1-2 ½	
	Omnivorous	1-2 ½	
	Leafroller		
	Orange Tortrix	1-2 ½	
	Saltmarsh	1-2 ½	
	Caterpillar		
Almonds	Fall Webworm	1-2	For leafrollers, start treating as soon as possible after hatching and before larvae are protected by leaf folds.
Apricots	Filbert Webworm	1-2	
Cherries	Omnivorous	1-2	
Filberts	Leafroller		
Nectarines	Citrus Cutworm	1-2 ½	
Peaches	Redhumped	1-2	
Pecans	Caterpillar		
Persimmons	Tent Caterpillar	1-2	
Plums	Roughskinned	½-1	
Pomegranate	Cutworm		
Prunes	Pecan Nut Casebearer	1-2 ½	Apply when caterpillars are actively feeding (Second to fourth instar).

Walnuts	Peach Twigborer	2-6
	Oriental Fruitmoth	2-6
	Navel Orangeworm	2-6
	Codling Moth	2-8

For single applications, in pecans, for pecan nut casebearer, use a minimum of 1.5 lb/acre. A split application of 1.0 lb./acre may provide better flexibility and improved targeting of egg hatches. Make first application when majority of eggs are in white or pink stage. Make the second application within 7-10 days.

Melons (Also see Vegetables)	Rindworm Complex	1-1 ½
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Apply at first sign of hatch before larvae enter fruit. Repeat as necessary to maintain control.

## RECOMMENDED APPLICATION RATES

### FRUIT, NUT, & VINE CROPS

CROP	INSECT	RATE LBS/ACRE
Strawberries	Armyworm*	1-3
	Gypsy Moth	1-2
	Looper	½-1
	Roughskinned Cutworm	1-2

### ADDITIONAL INSTRUCTIONS

Apply as necessary to maintain control. Use 20 gallons of water minimum per acre when using ground equipment and 5 gallons water minimum per acre by aircraft.

In a tankmix with contact insecticides, rates as low as 1 lb. of VAULT may be used for the control of armyworm.

\*Use to suppress light populations of small

(first to second instar)  
armyworms.

## RECOMMENDED APPLICATION RATES

### FIELD CROPS

CROP	INSECT	RATE LBS/ACRE	ADDITIONAL INSTRUCTIONS
Alfalfa (Hay and Seed)	Alfalfa Caterpillar	½-1	Under conditions of rapid plant growth and rapidly increasing armyworm populations (10 worms or greater per 180° sweep) use the highest rate. Against heterogenous worm populations, where 4th and 5th instars are present, and continuous egg laying, applications may provide variable control. Under these conditions, the addition of a contact insecticide in combination with <b>VAULT</b> is recommended.
Sudan Grass	Armyworm*	1-3	
Hay Crops & Other Forage Crops	Looper	½-2	
Small Grains	Armyworm*	2-3	The addition of a spreader sticker to <b>VAULT</b> may provide improved performance.  *Use to suppress light populations of small (1st to 2nd instar) armyworms.
Hops	Looper Omnivorous	½-2 1-2	*Use to suppress light populations of small (first to second instar) armyworms.  Apply as necessary to maintain control.

Leaf-tier	
Spotted Cutworm	1-2
Oblique Banded	1-2
Leafroller	

Begin treatment as soon as possible after hatching and before larvae are protected by leaf folds

## RECOMMENDED APPLICATION RATES

### FIELD CROPS

CROP	INSECT	RATE LBS/ACRE	ADDITIONAL INSTRUCTIONS
Canola	Armyworm*	1-3	Apply as necessary to maintain control.
Evening Primrose	Diamondback Moth	1-2 1/2	
	Imported Cabbageworm	1/2-1	
	Looper	1/2-2	
	Hornworms	1/4-1/2	
Field Corn	Armyworm*	1-3	*Use to suppress light populations of small (first to second instar) armyworms.
Pop Corn			
Seed Corn			
	Southwestern Corn Borer	2-3	Make initial application when economically damaging populations exist. Repeat as necessary to maintain control. Applications must be made to early instars prior to entering the ear or plant.
	European Corn Borer	2-3	Aids in control.
			Also see Bioigation.

\*Use to suppress light populations of small (first to second instar) armyworms.

Jojoba	Looper ( <u>Anacamptodes</u> spp.)	1-2
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Apply in a minimum of 50 gallons of water per acre by ground equipment or a minimum of 10 gallons of water by aerial equipment. Thorough coverage of foliage is essential and dictates the minimum spray volumes necessary.

## RECOMMENDED APPLICATION RATES

### FIELD CROPS

CROP	INSECT	RATE LBS/ACRE	ADDITIONAL INSTRUCTIONS
Dry Beans	Armyworm *	1-3	Apply as necessary to maintain control.
Peas	Green	1-2	
Lentils	Cloverworm		
Mint			
Peanuts	Looper	1-2	
Rice	Salt Marsh	1-2	
Safflower	Caterpillar		
Soybeans	Velvetbean	1-2	
Sugar Beets	Caterpillar		
Sunflower	<u>Helicoverpa</u> spp. ( <u>Heliiothis</u> spp.)	2-2½	
Sorghum	Cutworm	1-3	*Use to suppress light populations of small (first to second instar) armyworms.
Tobacco	Looper Tobacco	1-2 ¼-1	Apply as necessary to maintain control.

Hornworm  
Tobacco Budworm 1-2 1/2

## RECOMMENDED APPLICATION RATES

### COTTON - Except Arizona and California

TIMING	INSECT	RATE LBS/ACRE	ADDITIONAL INSTRUCTIONS
Early	Bollworm Tobacco Budwormspecies.	1/2-2 1/2	<p>For early season management of bollworm and budworm</p> <p>Initiate applications when 50% of plants are at pinhead square cotton stage, independent of bollworm and budworm egg and larval counts, or at first egg lay, whichever occurs earlier. Continue applications on 5 day spray interval up to synthetic pyrethroid spray window.</p> <p>For added worm control, tankmixing of VAULT with a labeled ovicide, such as, methomyl (0.125 lb. a.i./acre), profenofos (0.25 lb. a.i./acre), or thiodicarb (0.125-0.25 lb. a.i./acre) is recommended. Read and follow all precautions and restrictions on tankmix product labels.</p>



## RECOMMENDED APPLICATION RATES

### COTTON (CALIFORNIA/ARIZONA)

TIMING	INSECT	RATE LBS/ACRE	ADDITIONAL INSTRUCTIONS
Early and Mid-Season	Armyworm *	1-3	<p>Repeat as necessary throughout season to maintain control.</p> <p>If egg laying frequency indicates future moderate to heavy worm populations, time application spray to coincide with the second instar larvae. During periods of high temperatures, worms will progress to the third instar very rapidly and early application timing is necessary for control.</p> <p>To be effective, <b>VAULT</b> spray must be deposited at the larval feeding site. When plant cover is dense and worms are feeding in the lower 2/3 portion of the plant, aerial application of <b>VAULT</b> may not provide adequate control.</p> <p>*Use to suppress light populations of small (first to second instar) armyworms.</p>
	Cotton Leaf Perforator	1-2	
	Cotton Leafworm	1-2	
	Looper	1-2 ½	
	Saltmarsh Caterpillar	1-2	
	Bollworm	1-3	
Tobacco Budworm	1-3	For the suppression of light to moderate infestations, apply at first sign of egg laying or newly hatched worms (first instar larvae).	

## RECOMMENDED APPLICATION RATES

### SHADE TREES, ORNAMENTALS (Including Roses)

PESTS	RATE LBS/ACRE	ADDITIONAL INSTRUCTIONS
Spring and Fall Cankerworm	1/2 - 1	Apply when leaf expansion Elm reaches 40% to 50% as infestation warrants. If eggs hatch over a long period of time, or if reinfestation occurs, spray about 14 days after first applications.
Spanworm	1/2 - 1	
Tent Caterpillar	1/2 - 1	
Gypsy Moth	1/2 - 1	
Spruce Budworm	1/2 - 1	Apply when most larvae are 3rd-4th instar. Also consider the opening of the bud cap to ensure foliage exposure.
Jackpine Budworm	1/2 - 1	Apply after eggs have hatched and early instar larvae are feeding on exposed foliage.
Douglas Fir Tussock Moth	1/2 - 1	
Bagworm	1/2 - 1	
California Oak Moth	1/2 - 1	
Western Tussock Moth	1/2 - 1	
Fruittree Leafroller	1/2 - 1	
Mimosa Webworm	1/2 - 1	
Redhumped Caterpillar	1/4 - 1	
Fall Webworm	1/4 - 1/2	
Armyworm*	2 - 2 1/2	
Omnivorous Leafroller	1 - 2	

\*Use to suppress light populations of small (first to second instar) armyworms.

### TURF AND GRASS SEED PRODUCTION

Tropical Sodwebworm	2	Repeat as necessary throughout season to maintain control.
Armyworm*	2	
Sodwebworm	2	

\*Use to suppress light populations of small (first to second instar) armyworms.

**BIOGATION** - Center Pivot Irrigation Application for European and Southwestern Corn Borer in Field Corn (Not For Use in California)

## APPLICATION INSTRUCTIONS

**Rate** - For control of European Corn Borer and suppression of Southwestern Corn Borer using center-pivot irrigation equipment, apply a mixture of 2 to 3 lbs of VAULT per acre plus a registered sticker.

**Sticker and VAULT Mixture** - VAULT should be added to the tank first, then the recommended sticker. (See instructions below).

For best performance, make application in 0.5 inch/acre or less.

Filter size should allow for smooth flow of VAULT from the tank to injector pump (18-20 mesh).

## ATTENTION

### INSTRUCTIONS FOR DILUTED APPLICATION WITH STICKER

1. Pre-clean and flush nurse tank, lines, screen canister and pump with insectigation oil until they are water-free.
2. Use a 20 mesh screen or larger. A finer mesh screen may prevent the smooth flow of VAULT from the nurse tank into the pump.
3. Calibrate with insectigation oil.
4. Begin agitation.
5. Pour VAULT into tank and then the oil.
6. Maintain agitation during application.
  - o If you stop injecting the VAULT-oil mix due to rain, mechanical failure or etc., be sure to mix well and re-agitate uniformly before continuing application.
7. When you rinse the VAULT container, do so with insectigation oil. Avoid water contamination for oil-diluted applications.
8. Fine-tune calibration.

9. When application is complete, thoroughly flush the injection system and sprinkler system with insectigation oil.

Check label for Federal Chemigation requirements. Follow State and Local requirements for chemigation.

### APPLICATION EQUIPMENT CAUTIONS

The active ingredient in VAULT will settle in the tank and injections lines; adequate agitation must be provided before and during the injection period. Use only in systems that apply uniformly and have appropriate check valves. Do not apply when windspeed favors drift. When application is complete, thoroughly flush the injection system and sprinkler lines.

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.

The pesticide injection pipeline should contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline should contain either a functional, normally closed solenoid-operated valve connected to the system interlock or a functional vacuum relief valve to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system should contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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 when pesticide distribution is adversely affected.

### STORED SOYBEANS, GRAINS

(Indian Meal Moth, Almond Moth)

To control and prevent Indian Meal Moth and Almond Moth infestations of stored soybeans and grains, prepare a spray mixture which includes 1 gallon of water for every 3 oz. by weight of VAULT. The spray mixture may be applied either by treating the top 4 inches of grain as it is being augered into storage (applying 0.6 pint of mixture per bushel in the grain stream), or by treating the surface of grain after it is in the bin. The Table below can be used as a guide in determining the total amount of VAULT needed according to the bin diameter or the number of bushels to be treated.

Bin Diameter (ft)	Surface Area (sq ft)	Bushels (to 4 in depth)	VAULT Rate (by weight)
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21 7 22

			<u>Grams</u>	<u>oz</u>
8	50	13	42	1.50
12	113	30	100	3.50
16	201	53	170	6.00
20	314	84	240	8.50
24	452	120	370	13.00
28	615	163	510	18.00
32	804	214	652	23.00

To insure thorough coverage when making applications to the grain surface after it is in the bin, apply spray mixture in three (3) applications. Mix the grain with a scoop or rake to a depth of four (4) inches after each application.

Stored grain may be treated anytime, but for best results, treat grain at the time it is placed into storage or shortly thereafter, or in the early spring prior to egg-laying. Full season control is normally experienced. Re-treat only if reinfestation occurs.

For the protection of bagged grain, apply spray mixture to entire grain mass, and mix thoroughly prior to bagging. VAULT at 12 oz by weight per 10 gallons of water will treat approximately 100 bushels.

Treated grain may be used at any time after treatment.

## FLOWERS AND ORNAMENTALS

VAULT may also be used on flowers and ornamentals outdoors and in the greenhouse at a rate of ½ - 3 lb per 100 gallons of water for control of listed insects on this label.

### GUIDE FOR SMALL SPRAY VOLUME MIXING

<u>Rate</u> <u>Lbs/A</u>	<u>Conversion Rate*</u> <u>Teaspoons/Gallon</u>
½	1
1	2
2	4

\* Assumes Application to spray runoff.

**LIMITATION OF WARRANTY AND LIMITATION OF LIABILITY**

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