

Pm 18

53219-3

Page 1 of 0

Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0060. Approval expires 11-30-93

(A)



United States Environmental Protection Agency
Office of Pesticide Programs (H7505C)
Washington, DC 20460

Application for Pesticide:

☐ Registration
☒ Amendment
☐ Other

OPP Identifier Number

182218

Section I

1. Company/Product Number 53219-3	2. EPA Product Manager Hutton	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) MVP Bioinsecticide	PM# 18	
5. Name and Address of Applicant (Include ZIP Code) Mycogen Corporation 4980 Carroll Canyon Rd San Diego, CA 92121 <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.)

Notification amendment - Addition of chemigation verbiage per PR Notice 87-1

NOTIFICATION
LABEL NOT REVIEWED
PER PR NOTICE 88-8

DATE 6/30/93

Section III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input checked="" 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 Package wgt.	No. per container	If "Yes," Package wgt.	No. per container
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) of Retail Container 2.5 Gallon		5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label Is Affixed To Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input checked="" type="checkbox"/> Other (Plastic sleeve)			

Section IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Christopher Davis	Title Registration Manager	Telephone No. (Include Area Code) 619-453-8030
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 (Stamped)
2. Signature 	3. Title Registration Manager	
4. Typed Name Christopher Davis	5. Date 6/2/93	



MVP®

BIOINSECTICIDE

AQUEOUS FLOWABLE BASED ON THE CELLCAP® ENCAPSULATION SYSTEM

For control of certain caterpillar pests on vegetables, fruits
and field crops

ACTIVE INGREDIENT

Delta endotoxin of *Bacillus thuringiensis* variety *kurstaki*
encapsulated in killed *Pseudomonas fluorescens*10%

INERT

INGREDIENTS90%

TOTAL100%

One gallon of this product contains 0.9 lbs of delta
endotoxin of *Bacillus thuringiensis* variety *kurstaki*
encapsulated in killed *Pseudomonas fluorescens*

KEEP OUT OF REACH OF CHILDREN

CAUTION

Avoid contact with eyes, skin and clothing.
Wash thoroughly after handling. See back panel for additional
precautionary statements

EPA Registration No. 53219-3
EPA Establishment No. 37429-GA-2

MVP is a registered trademark of Mycogen Corporation
CellCap is a registered trademark of Mycogen Corporation.
The CellCap encapsulation system is protected by U.S. patent nos. 4,695,462
and 4,695,455

Net Contents: 2½gallons

NOTIFICATION
LABEL NOT REVIEWED
PER PR NOTICE 88-6
DATE 6/30/93



MYCOGEN CORPORATION
4980 Carroll Canyon Road
San Diego, CA 92121
1-800-745-7476



MVP®

BIOINSECTICIDE

GENERAL INFORMATION

Mode of Action: This product is a stomach poison against insects which must be eaten by targeted insects to be effective. After eating foliage that has been sprayed with this product, insects immediately stop feeding. Death usually occurs 1 to 5 days later.

Re-entry and Pre-harvest Restrictions: This product can be applied up to the day of harvest (zero days to harvest). Workers may re-enter the field immediately after use of this product.

Beneficial Insects: This product does not harm beneficial insects (honeybees, lacewings, parasitic wasps, ladybird beetles, predatory beetles and flies, etc.)

DIRECTIONS FOR USE

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

Recommended Rates

Rates and frequency of applications will vary depending on level and type of larval infestation, and type of application equipment used.*

Light infestations	1-2 quarts per acre
Moderate to heavy infestations	2-3 quarts per acre
Extremely heavy infestations	3-4 quarts per acre

*For aerial applications or when conditions interfere with good coverage, the higher recommended rates should be used.

Application Timing

Always target newly hatched or small larvae with spray applications so that insects are controlled before they cause extensive feeding damage. Always make applications *before* older larvae are protected or begin feeding inside the plant or fruit.

To determine optimal timing of first application, scout fields regularly for the appearance of eggs and newly hatched larvae. Make the first application as soon as larvae begin to hatch. Repeat applications as needed to maintain larval control.

Larvae may tunnel or bore into buds, heads, stalks, or fruits as they mature. Once larvae are protected inside the plant, they will be difficult to control with this, or other foliar applied products.

Insects Controlled

This product controls the listed caterpillar (e.g. "larval") pests, including those resistant to synthetic chemical pesticides.

For control of tomato pinworm or *Heliothis* species, use this product for early season control *only* when larvae are exposed and total coverage is possible. Once older larvae begin to feed inside the plant, they will not be controlled by this product.

For control of large (>1/3" long) cabbage loopers, armyworms or *Heliothis* larvae, MVP may be tank mixed with certain labeled contact insecticides to increase efficacy. Always conduct a physical compatibility test (jar test) before mixing products for the first time. Follow the label instructions for each product.

Mixing and Application

Thorough coverage of the foliage is **NECESSARY** for optimal performance of this product. All application techniques and equipment should result in uniform and complete coverage of all leaf surfaces on the plant. Control of target insects is achieved only when susceptible stages of the insect eat the treated plant. Skips, streaks or untreated foliage below the canopy surface will result in reduced pest control.

Fill spray tank 3/4 full with water and add recommended amount of this product to tank. Mix thoroughly while adding remainder of water. Agitate as necessary to maintain suspension.

If rain or irrigation occurs on day of application, reapply this product.

For conventional ground application, apply recommended amount of product in at least 20 gallons of water per acre. For best results, use volumes of 40 gpa. and pressure of at least 35 psi or more. For aerial application, apply recommended amount of product in at least 5 gallons of water per acre.

Use sufficient volume of water to thoroughly wet upper and lower leaf surfaces. Do not apply to runoff as it will wash off MVP®.

Use an approved spreader or spreader-sticker to improve coverage on hard to wet crops.

For Application with hand spray application equipment

Use 1.5 to 3 oz. (3 to 6 tablespoons) of this product per gallon of water. Time the application as recommended above.



MYCOGEN CORPORATION
4980 Carroll Canyon Road
San Diego, CA 92121
1-800-745-7476

Crop Recommendations
Leafy, Root and Tuber Vegetables,
Cucurbits, Cole Crops

Insects Controlled

Artichoke	Armyworms
Bok Choy	Artichoke plume moth
Broccoli	Beet armyworm
Broccoli raab	Cabbage looper
Brussels Sprouts	Cabbage webworm
Cabbage	Corn earworm
Cantaloupe	Cross striped
Carrot	cabbageworm
Casaba	Diamondback moth
Cauliflower	European corn borer
Celery	Fall armyworm
Chinese Cabbage	False celery leafminer
Collard	Green cloverworm
Crenshaw	Hornworms
Cucumber	Imported cabbageworm
Eggplant	Loopers
Greens	Melonworm
Honey ball melon	Omnivorous leafroller
Honeydew melon	Pickworm
Horseradish	Potato tuberworm
Kale	Rindworms
Kohlrabi	Saltmarsh caterpillar
Lettuce	Soybean looper
Melon	Tobacco budworm
Melon hybrid	Tomato fruitworm
Muskmelon	Tomato pinworm
Mustard greens	Velvetbean caterpillar
Napa cabbage	Yellowstriped armyworm
Pepper	
Persian melon	
Potato	
Radish	
Spinach	
Squash	
Sugar beet	
Tomato	
Turnip	
Watercress	
Watermelon	

Legumes

Insects controlled

Beans	Armyworms
Phaseolus species	Beet armyworm
Lupinus species	Cabbage looper
Vigna species	Diamondback moth
Chickpea	Green cloverworm
Peas	Helicoverpa spp
	Loopers
	Velvetbean caterpillar

Nuts, Pome Fruit, Stone
Fruit

Insects Controlled

Almond	Citrus cutworm
Apple	Codling moth
Apricot	Fruit tree leafroller
Nectarine	Garden tortrix
Peach	Navel orangeworm
Pear	Oblique banded leafroller
Pecan	Omnivorous leafroller
Pistachio	Orange tortrix
Plum	Oriental fruit moth
Prune	Peach twig borer
Walnut (English and Black)	Redbanded leafroller
	Tent caterpillars
	Tufted apple budmoth
	Varigated leafroller

Small Fruits and Berries

Insects Controlled

Blackberry	Achema sphinx moth
Blueberry	Armyworms
Caneberry	Blueberry leafroller
Cranberry	Blueberry spanworm
Raspberry	Cabbage looper
Strawberry	Fruitree leafroller
	Loopers
	Oblique banded leafroller
	Omnivorous leafroller
	Orange tortrix
	Saltmarsh caterpillar
	Tobacco budworm

Field Crops

Insect Controlled

Canola (Rapeseed)	Armyworms
Cotton	Beet armyworm
Peanut	Cabbage looper
Soybean	Cotton bollworm
Tobacco	Cotton leafworm
	Diamondback moth
	Fall armyworm
	Green cloverworm
	Hornworm
	Imported cabbageworm
	Loopers
	Obliquebanded leafroller
	Podworms
	Soybean looper
	Tobacco budworm
	Velvetbean caterpillar

**Turf, Flowers, Bedding
and Indoor Plants
(including greenhouse)**

Insect Controlled

Bedding plants
Flowers
Ornamentals
Turf

Armyworms
Cabbage looper
Diamondback moth
Fall armyworm
Loopers
Omnivorous leafroller
Tobacco budworm

**Forest, Ornamental
Landscape Trees and Shrubs**

Insect Controlled

Shade trees
Nursery trees

Armyworms
Buckmoth caterpillar
Fruitree leafroller
Tent caterpillar
Tortrix

Tropical and Other Fruit

Insect controlled

Kiwi Fruit

Omnivorous leafroller

Avocado

Cabbage looper
Loopers
Omnivorous leafroller
Omnivorous looper
Orange tortrix

Grapes

Armyworms
Beet armyworm
Cabbage looper
Grape berry moth
Grape leafroller
Grapeleaf skeletonizer
Loopers
Obliquebanded leafroller
Omnivorous leafroller
Saltmarsh caterpillar
Tobacco budworm
Western grapeleaf skeletonizer

**Forage Grasses,
Forage Legumes**

Insects Controlled

Alfalfa (Hay & Seed)

Armyworms
Beet armyworm
Cabbage looper
Fall armyworm
Green cloverworm
Loopers
Velvetbean caterpillar
Yellowstriped armyworm

Citrus

Insects Controlled

Grapefruit
Lemon
Lime
Orange
Tangelo

Citrus cutworm
Fruit tree leafroller

CHEMIGATION

Apply this product only through sprinkler (including center pivot, lateral move end low side (wheel) roll, traveler, big gun, solid seat, or hand move) irrigation systems. Do not apply this product through any other type of irrigation systems. For best results use irrigation levels of 0.15 to 0.5 inches of water per acre.

Shake the product container well or otherwise agitate the product before pouring or pumping into a nurse tank.

Product may be injected undiluted and does not require agitation in the nurse tank. Agitate the product again if shutdown periods are longer than 36 hours.

If dilution of the product is required to obtain proper application rate, dilute in a 1 to 1 ratio of water to product and maintain continuous agitation during application. Agitate again after any shutdown period. Do not mix with nonemulsifiable oil.

When application is completed, thoroughly flush the injection system and sprinkler lines with water.

Do not apply when wind speed favors drift beyond the area intended for treatment.

In center pivot systems the application of this product must be made continuously for the duration of the water application.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact your State Extension Service specialists, equipment manufacturers or other experts.

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 supplies are in place. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

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. 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. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. 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. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. 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. 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.

PRECAUTIONARY STATEMENTS

CAUTION - Hazards to Humans and Domestic Animals

May cause skin sensitization reactions in certain individuals. Avoid contact with eyes, skin or clothing. Use protective gloves, goggles and dust mask when applying this product.

Statement of Practical Treatment: If in eyes, flush with plenty of water. Get medical attention if irritation persists. Wash thoroughly with soap and water after handling.

Environmental Hazards: Keep out of lakes, ponds or streams. Do not contaminate aquatic systems by cleaning of equipment or disposal of wastes.

For emergency medical information, call toll-free 1-800-228-5635

STORAGE AND DISPOSAL

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

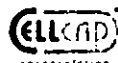
Storage: Keep container unopened until use. Store unused product in original container. This product should be stored at temperatures between 35°F and 90°F.

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

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

LIMIT OF WARRANTY AND LIABILITY

This product conforms to the description on this label and is reasonably fit for the purpose set forth on this label when used according to the label directions and under the specified label conditions. THE MANUFACTURER DISCLAIMS ANY AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. Buyer and all users assume all risks and responsibility for loss or damage if this product is used, stored, handled or applied under any condition not reasonably foreseeable or beyond the manufacturer's control, or not as explicitly set forth in this label. THE LIMIT OF THE MANUFACTURER'S LIABILITY SHALL BE THE PURCHASE PRICE FOR THE QUANTITY INVOLVED. IN NO EVENT SHALL THE MANUFACTURER BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.



SUPPLEMENTAL LABEL



DIRECTIONS FOR CHEMIGATION APPLICATION

Label must be in the hands of the user at time of pesticide application.

Read and follow all applicable restrictions, precautions, and directions for use on the EPA registered label.

Recommended Rates

Rates and frequency of applications will vary depending on level and type of larval infestation, and type of application equipment used.

Light infestations	1-2 quarts per acre
Moderate to heavy infestations	2-3 quarts per acre
Extremely heavy infestations	3-4 quarts per acre

Application Timing

- o Always target newly hatched or small larvae with spray applications so that insects are controlled before they cause extensive feeding damage. Always make applications *before* older larvae are protected or begin feeding inside the plant or fruit.
- o To determine optimal timing of first application, scout fields regularly for the appearance of eggs and newly hatched larvae. Make the first application as soon as larvae begin to hatch. Repeat applications as needed to maintain larval control.
- o Larvae may tunnel or bore into buds, heads, stalks, or fruits as they mature. Once larvae are protected inside the plant, they will be difficult to control with this, or other foliar applied products.

Mixing and Application

- o Thorough coverage of the foliage is **NECESSARY** for optimal performance of this product. All application techniques and equipment should result in uniform and complete coverage of all leaf surfaces on the plant. Control of target insects is achieved only when susceptible stages of the insect eat the treated plant. Skips, streaks or untreated foliage below the canopy surface will result in reduced pest control.
- o Fill spray tank $\frac{3}{4}$ full with water and add recommended amount of this product to tank. Mix thoroughly while adding remainder of water. Agitate as necessary to maintain suspension.
- o If rain or irrigation occurs on day of application, reapply this product.
- o Apply recommended amount of product in at least 20 gallons of water per acre. For best results, use volumes of 40 gpa, and pressure of at least 35 psi or more.

NOTIFICATION
LABEL NOT REVIEWED
PER PR NOTICE 88-6
DATE 6/30/93

EPA Registration No. 53219-3

MVP is a registered trademark of Mycogen Corporation
CellCap is a registered trademark of Mycogen Corporation

Mycogen Corporation • 5451 Oberlin Drive, San Diego, California 92121 • (619) 453-8030, FAX (619) 453-0613

Chemigation

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Mycogen Corporation
4980 Carroll Canyon Road
San Diego, California 92121
619 453 8030
FAX 619 453 2753

June 2, 1993

Phil Hutton, PM 18
Document Processing Desk
Office of Pesticide Programs(H7505C)
Room 266A, Crystal Mall #2
1921 Jefferson Davis Highway
Arlington, VA 22202

Dear Mr. Hutton:

**RE: MVP Bioinsecticide (EPA Reg. No. 53219-3)
Notification Amendment**

Mycogen Corporation herein submits a notification amendment to add the use of MVP Bioinsecticide via irrigation systems (chemigation). We certify that we have strictly followed the requirements of PR-Notice 87-1 when adding the chemigation verbiage to the label.

In support of this notification amendment, please find enclosed the following materials:

- 1) A completed "Application for Pesticide Amendment" form,
- 2) Three copies of the container labeling,
- 3) Three copies of the supplemental labeling (to be used prior to labeling of new packaging).

If you have any questions or comments, please contact me at 619-453-8030.

Sincerely,

Christopher Davis
Registration Manager