



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:

100-912

Date of Issuance:

November 22,
1999

Term of Issuance: Conditional

Name of Pesticide Product:

Fulfill™

NOTICE OF PESTICIDE:

☒ Registration
☐ Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Novartis Crop Protection, Inc.
Regulatory Affairs
P.O. Box 18300
Greensboro, NC 27419-8300

Attention: Dr. Robert Wurz

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(C) provided that:

- A. within 6 months of receipt of a letter outlining any deficiencies in the analytical methods now undergoing trials for validation, you submit the missing information or data.
- B. within 15 months of receipt of this notice, you submit the following two product chemistry tests:
1. Storage Stability (63-17)
 2. Corrosion Characteristics (63-20)

Signature of Approving Official:

Donald B. Pearson

Date:

NOV 22 1999

C. within one (1) year of this notice, you submit the following data:

1. Ecological Effects Data
Acute Estuarine/Marine Toxicity (shrimp), 72-3(c)
2. Environmental Fate Data
Photodegradation on Soil (161-3)

D. within two (2) years of this notice, you submit the following data:

1. Toxicology Data:
Developmental Neurotoxicity Study (870-6300 or 83-6)
2. Ecological Effects Data:
Avian Reproduction (mallard), 71-4(b)

E. within three (3) years of this notice, you submit the following data:

1. Environmental Fate Data:
Drinking water monitoring

F. Submit two copies of the revised final printed labeling (booklet, box, and packet labels) before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A copy of the label stamped "Accepted" is enclosed for your records.

Dan Peacock, Biologist
Insecticide-Rodenticide Branch
Registration Division (7504C)

Enclosure: Stamped Label

(Attached Booklet)

(11/9/99)

Fulfill®

INSECTICIDE

For control of certain aphids in potatoes (and other tuberous and corm vegetables) and tobacco

Active Ingredient:	
Pymetrozine (CAS No. 123312-89-0)	50.0%
Other Ingredients:	50.0%
Total:	100.0%

Fulfill is a water-dispersible granule containing 50% active ingredient by weight.

EPA Reg. 100-912

EPA Est. 67545-AZ-1

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements inside booklet for Use before applying.

1 POUND, 11.5 OUNCES (27.5 OUNCES)
NET WEIGHT

NCP 912A-L4A 0499

Made in Switzerland

ACCEPTED
with COMMENTS
in EPA Letter Dated:

Nov 22 1999

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
100-912

DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire **Directions for Use** and the **Conditions of Sale and Warranty** before using this product. If terms are not acceptable, return the unopened product container at once.

CONDITIONS OF SALE AND WARRANTY

The **Directions for Use** of this product reflect the opinion of experts based on laboratory and field trials. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application all of which are beyond the control of Novartis Crop Protection, Inc. or the Seller. All such risks shall be assumed by the Buyer.

Novartis warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions for Use** subject to the inherent risks referred to above. **Novartis makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Novartis or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product.** Novartis and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing **Conditions of Sale and Warranty**, which may be varied only by agreement in writing signed by a duly authorized representative of Novartis.

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.

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 12 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:

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

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

GENERAL INFORMATION

Fulfill is an insecticide for the control of certain aphid species in potatoes (and other tuberous and corm vegetables) and tobacco.

Apply Fulfill to plant foliage when aphids first appear, before populations build to damaging levels.

Thorough spray coverage is essential for best performance. Apply Fulfill in sufficient water to ensure good coverage of all plant surfaces. The use of greater water volumes will generally result in better coverage, especially under adverse conditions (e.g., hot, dry) or where a dense plant canopy exists. See the **Recommended Applications** section of this label for specific recommendation on spray volumes for different crops.

The use of a penetrating type spray adjuvant at the manufacturer's suggested rate, is recommended for all applications of Fulfill. The use of a surfactant typically improves coverage and results in optimum insect control, especially in hard-to-wet crops.

Fulfill exhibits excellent translaminar movement (movement across the leaf surface and into plant tissue) and is rainfast as soon as the spray solution has dried.

Mode of Action

Fulfill works primarily by ingestion, but also has some contact activity. Affected aphids stop feeding shortly after exposure, but may remain on the plant foliage until they die, which is usually within 2 to 4 days. Fulfill has residual activity in the plant and will control aphids that move onto the plant after spraying.

Suitability for Integrated Pest Management Programs

Fulfill is suitable for Integrated Pest Management (IPM) programs as it has a low toxicity to beneficial insects (including honeybees and bumblebees) and mites. It can be used in IPM programs using beneficial insects.

Phytotoxicity

Fulfill has been tested for phytotoxicity at the label rates and has shown no effects on the crops listed on this label.

Use Restrictions

Do not apply more than 2.75 oz. of Fulfill per acre per application.

Do not apply more than 5.50 oz. of Fulfill per acre per year.

Allow 7 days between applications and 14 days between last application and harvest (preharvest interval).

Do not use Fulfill in nurseries or in plant propagation houses, or on any plants grown for use as transplants.

Resistance Management

Fulfill belongs to a class of chemicals not previously used as pesticides and not known to be cross-resistant to other classes of insecticides. However, because of the inherent risks of resistance development to any product, it is strongly advised that Fulfill be used in a sound resistance management program that includes rotation with other products with different modes of action.

Aphids Controlled¹

<u>Common Name</u>	<u>Scientific Name</u>
Bean aphid	<i>Aphis fabae</i>
Bird cherry-oat aphid	<i>Rhopalosiphum padi</i>
Buckthorn aphid	<i>Aphis nasturtii</i>
Cabbage aphid	<i>Brevicoryne brassicae</i>
Corn leaf aphid	<i>Rhopalosiphum maidis</i>
English grain aphid	<i>Sitobion avenae</i>
Green peach aphid	<i>Myzus persicae</i>
Hop aphid	<i>Phorodon humuli</i>
Melon/cotton aphid	<i>Aphis gossypii</i>
Pea aphid	<i>Acyrtosiphon pisum</i>
Potato aphid	<i>Macrosiphum euphorbiae</i>
Red lettuce aphid	<i>Uroleucon pseudambrosiae</i>
Tobacco aphid	<i>Myzus nicotianae</i>
Turnip aphid	<i>Lipaphis erysimi</i>

¹See individual crop sections for information on which aphid species most typically infest a particular crop.

APPLICATION PROCEDURES

Ground Spray Equipment

Use sufficient water to provide thorough, uniform coverage.

Use sprayer nozzles that provide accurate, uniform application and medium-sized droplets.

Calibrate sprayer from manufacturer's instructions or state's recommendations to insure delivery of adequate spray volume per unit area.

Applications using sufficient water volume to provide thorough and uniform coverage generally provide the most effective aphid pest control. For ground applications, use a minimum of 10 gals./A unless otherwise indicated in the **Recommended Applications** section of this label. In situations where a dense canopy exists and/or aphid infestations are high, use greater water volumes (i.e. at least 20 gals./A).

Mixing Instructions

Prepare no more spray mixture than is needed for the immediate application. Thoroughly clean spray equipment before using this product. Agitate the spray solution before and during application. Do not let the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area. Keep product container tightly closed when not in use.

Fulfill Alone: Add $\frac{1}{2}$ of the required amount of water to the mix tank. With the agitator running, add the Fulfill to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the Fulfill has completely and uniformly dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

Note: Do not use liquid fertilizer as a carrier for Fulfill.

Fulfill + Tank Mixtures: Add $\frac{1}{2}$ of the required amount of water to the mix tank. Start the agitator running before adding any tank mix partners. In general, tank mix partners should be added in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables) such as Fulfill, liquid flowables, liquids and emulsifiable concentrates. **Always allow each tank mix partner to become fully dispersed before adding the next product.** Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all the mixture has been applied.

Note: When using Fulfill in tank mixtures, all products in water-soluble packaging should be added to the tank before any other tank mix partner, including Fulfill. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank.

If using Fulfill in a tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank mix product label. No label dosage rate should be exceeded and the most restrictive label precautions and limitations should be followed. This product should not be mixed with any product which prohibits such

mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are labeled.

Compatibility: Fulfill is compatible with most insecticide, fungicide, fertilizers, and micronutrient products. However, the physical compatibility of Fulfill with tank mix partners should be tested before use. To determine the physical compatibility of Fulfill with other products, use a jar test, as described below.

Using a 1½ quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven acceptable, use the same procedure for adding required ingredients to the spray tank. If the combination proves not to be physically compatible, do not use these products in a tank mix.

The crop safety of all potential tank mixes on all crops may not have been tested. Before applying any tank mixture not specifically recommended on this label, the safety to the target crop should be confirmed.

Aerial Application

Apply Fulfill in water, using a minimum spray volume of 5 gals./A as indicated in the **Recommended Applications** section of this label. Increase spray volume to 10-20 gals./A under adverse conditions (i.e., high temperature, low relative humidity, dense plant canopy). Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift or inversion may occur. Do not apply directly to humans or animals.

Recommendations to Avoid Spray Drift

As with all crop protection products, it is important to avoid off-target movement. Do not allow spray to drift onto adjacent land or crops. Follow these recommendations to avoid spray drift.

- Do not apply when wind velocity exceeds 15 mph. Avoid applications when wind gusts approach 15 mph.
- Avoid spraying when conditions are favorable for drift (high temperatures, low relative humidity, drought). Do not apply during temperature inversions. If an inversion condition is suspected, consult with local weather services before making an application.

- Use the largest droplet size consistent with good pest control. Small droplets are more prone to spray drift, and can be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.
- Apply as close to target plants as practical to obtain a good spray pattern for adequate coverage. Applications more than 10 ft. above the crop canopy should be avoided.
- For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used and must not exceed 75% of wing span or rotor diameter.

Chemigation

Application Through Irrigation Systems (Chemigation) - Potatoes

Only: Fulfill alone or in combination with other products which are registered for application through sprinkler irrigation may be applied through irrigation systems. Apply this product only through center pivot, solid set, hand move, or moving wheel irrigation systems. Do not apply Fulfill through any other type of irrigation system. Lack of effectiveness or illegal pesticide residues can result from nonuniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. 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.

Using Water from Public Water Systems: DO NOT APPLY FULFILL THROUGH ANY IRRIGATION SYSTEM PHYSICALLY CONNECTED TO A PUBLIC WATER SYSTEM. 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. Fulfill may be applied through irrigation systems which may be **supplied** by a public water system **only if** the water from the public water system is 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. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

Any irrigation system using water supplied from a public water system must also meet the following requirements.

Operating Instructions FOR ALL RECOMMENDED TYPES OF IRRIGATION SYSTEMS

1. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.
2. 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.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake 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.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
6. 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.
7. 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.
8. Do not apply when wind speed favors drift beyond the area intended.

Calibration and Application Instructions

Fulfill should be applied under the schedule specified in the specific crop use recommendations, not according to the irrigation schedule unless the events coincide.

In general, set the equipment to apply the minimum amount of water per acre. Run the system at 85-90% of the manufacturer's maximum rated travel speed.

The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler irrigation equipment. Users should check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

Center Pivot Irrigation Equipment

Notes: (1) Use only drive systems that provide uniform water distribution. (2) Do not use end guns when chemigating Fulfill through center pivot systems because of nonuniform application. (3) Plug the first nozzle closest to the well head to protect the water source.

1. Determine the size of the area to be treated.
2. Determine the time required to apply 0.1-0.25 inches of water over the area to be treated when the system and injection equipment are operated at normal pressures, as recommended by the equipment manufacturer. Run the system at 80-95% of the manufacturer's rated maximum travel speed.
3. Using water, determine the injection pump output when operated at normal line pressure.
4. Determine the amount of Fulfill, and any tank mix partners, required to treat the area covered by the irrigation system.
5. Add the required amount of Fulfill, any tank mix partners, and sufficient water to meet the injection time requirements to the solution tank. (See the **Mixing Instructions** section of this label.)
6. Make sure the system is fully charged with water before starting injection of the Fulfill solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
7. Maintain constant agitation in the solution tank during the injection period.
8. Inject the specified amount of Fulfill per acre continuously for one complete revolution of the system.
9. Stop the injection equipment after treatment is completed. Continue to operate the system until the Fulfill solution has cleared all of the sprinkler heads.
10. Allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water.

Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

1. Determine the acreage covered by the sprinklers.
2. Fill injector solution tank with plain water and calibrate the flow rate of the system to deliver the contents of the tank over a 20-40 minute time interval.
3. Determine the amount of Fulfill required to treat the area covered by the irrigation system.
4. Add the required amount of Fulfill, and any other tank mix partners, into the same quantity of water used to calibrate the injection period. (See the **Mixing Instructions** section of this label.)
5. Operate the system at the same pressure and time interval established during the calibration.
6. Inject specified amount of Fulfill per acre foreither, a 20-40 minute period at the end of a regular irrigation set, or as a 20-40 minute injection as a separate application not associated with a regular irrigation to maximize retention of the insecticide by the foliage.
7. Stop injection equipment after treatment is completed. Continue to operate the system until the Fulfill solution has cleared the last sprinkler head. To ensure lines are flushed and free from remaining pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

RECOMMENDED APPLICATIONS

According to the following table, Fulfill may be used for the sites and pests at the indicated rates and limitations.

Crop	Pest	Rate Per Acre Per Application	Remarks
Potatoes (and other Tuberous and Corm Vegetables)			
Potato			
Sweet potato			
True yam			
Bean yam			
Jerusalem artichoke	Green peach aphid		Apply when aphids first appear, before populations build to damaging levels.
Chinese artichoke			
Edible canna			
Chayote root	Potato aphid		
Arracacha			
Arrowroot			
Bitter cassava			
Sweet cassava	Melon aphid		
Chufa			
Dasheen	Buckthorn aphid		
Ginger			
Leren			
Tanier			
Tumeric			

**Foliar
application:**
2.75 oz./A

Additional applications may
be needed to control
persistent aphid
populations.

Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 5 gals./A when applied by air and a minimum of 10 gals./A when applied by ground. The addition of a penetrating type spray adjuvant at the manufacturer's suggested rate, is recommended to provide optimum coverage and insect control.

Do not apply more than 2.75 oz./A per application. Do not exceed a total of 5.5 oz./A per crop per season.

Allow a minimum of 7 days between applications. Allow 14 days (PHI) between the last application and harvest.

Note: Fulfill causes cessation of insect feeding shortly after application. However, aphids may remain on the plant for 2-4 days before they die.

Crop	Pest	Rate Per Acre Per Application	Remarks
Tobacco	Green peach aphid	Foliar application:	Apply when aphids first appear, before populations build to damaging levels.
	Tobacco aphid	2.75 oz./A	

Do not apply at rates lower than those recommended on this label. Two applications may be needed to control heavy aphid infestations.

Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage; use a minimum of 20 gals./A when applied by ground. Do not apply by air. The addition of a nonionic surfactant or organosilicone-based surfactant, at the manufacturer's suggested rate, is recommended to provide optimum coverage and insect control.

Do not apply more than 2.75 oz./A per application. Do not make more than two applications per crop per season; do not exceed a total of 5.5 oz./A per crop per season.

Allow a minimum of 7 days between applications. Allow 14 days (PHI) between the last application and harvest.

Note: Fulfill causes cessation of insect feeding shortly after application. However, aphids may remain on the plant for 2-4 days before they die.

ROTATIONAL RESTRICTIONS

The rotational (plantback) restrictions for Fulfill are 30-days for all crops.

STORAGE AND DISPOSAL

Storage

Store in a cool, dry place.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency call 1-800-888-8372, day or night.

Pesticide Disposal

Do not contaminate water, food, or feed by storage or disposal. Pesticide wastes may be toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of federal law. If these wastes cannot be used according to label instruction, contact your State Pesticide or

Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Disposal

Triple rinse container. Then offer for recycling or reconditioning, or puncture and dispose of using one of the following methods: (1) depositing in a sanitary landfill, (2) incineration, or, (3) burning, if allowed by state and local ordinances. Stay out of smoke from burning containers.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

FIRST AID	
Have container or label when seeking treatment advice.	
If product:	Then:
Gets on skin	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center, doctor, or 1-800-888-8372 for treatment advice.
Gets in eyes	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 5 minutes.• Remove contact lenses, if present.• Continue to rinse eyes for 10-15 minutes.• Call a poison control center, doctor, or 1-800-888-8372 for treatment advice.

Note to Doctor	<ul style="list-style-type: none">• If ingested, induce emesis or lavage stomach. Treat symptomatically.
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Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statements

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

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

Environmental Hazards

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water.

Do not use, pour, spill, or store near heat or open flame.

Fulfill® trademark of Novartis
U.S. Patent No. 5,153,200

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Made in Switzerland

Novartis Crop Protection, Inc.
Greensboro, North Carolina 27419

NCP 912A-L4A 0499

[QUARK/FULFILL/FULFILL-A] - ccg - 11/9/99

(Nondetachable Container Label)

Fulfill®

INSECTICIDE

For control of certain aphids in potatoes (and other tuberous and corm vegetables) and tobacco

Active Ingredient:

Pymetrozine: (CAS No. 123312-89-0) 50.0%

Other Ingredients: 50.0%

Total: 100.0%

Fulfill is a water-dispersible granule.

See directions for use in attached booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-912

EPA Est. 67545-AZ-1

Fulfill® trademark of Novartis

U.S. Patent No. 5,153,200

1 POUND, 11.5 OUNCES (27.5 OUNCES)

U.S. Standard Measure

KEEP OUT OF REACH OF CHILDREN.

CAUTION

Precautionary Statements

Hazards to Humans and Domestic Animals

Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

ACCEPTED
with COMMENTS
in EPA Letter Dated

NOV 22 1990

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
100-912

FIRST AID	
Have container or label when seeking treatment advice.	
If product:	Then:
Gets on skin	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center, doctor, or 1-800-888-8372 for treatment advice.
Gets in eyes	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 5 minutes.• Remove contact lenses, if present.• Continue to rinse eyes for 10-15 minutes.• Call a poison control center, doctor, or 1-800-888-8372 for treatment advice.

Note to Doctor	<ul style="list-style-type: none">• If ingested, induce emesis or lavage stomach. Treat symptomatically.
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Environmental Hazards

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 contaminate water when cleaning equipment or disposing of equipment wash water.

Storage

Store in a cool, dry place.

For minor spills, leaks, etc., follow precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equip-

ment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

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Product ID.

[QUARK/FULFILL/FULFILL-A] - ccg - 11/9/99