€PA	United State Environmental Prote Washington, DC	ction Agency	Registra   Amendm   X Other	5	OPP Identifier Number Notification
	Applic	ation for Pesticide	Section I		
I. Company/Product Number 100-904			oduct Manager	3. P	roposed Classification
4. Company/Product (Name)		PM# 0 3	>		None X Restricted
Proclaim®		IRB			
5. Name and Address of App Novartis Crop Protect P. O. Box 18300 Greensboro, NC 274	ion, Inc.		ilar or identical in con		FRA Section 3(c)(3) (b)(i), my labeling to:
		Section - II		·	
Amendment - Explain below.       Resubmission in response to Agency letter dated February 13       1997		ebruary 13,	Final printed labe Agency letter dat "Me Too" Applica	tion.	<b>TIFICATION</b> T 2 9 1999
Notification - Explain t	elow.		Other - Explain b	elow.	
Explanation: Notific	ation of adding the pes	t, leafminers, to the l	abel.	<u> </u>	
•		Section - III			
1. Material This Product W	II Be Packaged In:				
Child-Resistant Packaging Yes" X No	Unit Packaging Yes X No	0. If "Yes"	Packaging 2.	x	ontainer Metal Plastic Glass Paper
be submitted	per Unit Packaging wgt.cont				Other (Specify)
3. Location of Net Contents I		Size(s) Retail Container	5.		abel Directions
Label X	Container	e Quart		On Lab X On Lab	el eling accompanying product
6. Manner in Which Label is	Affixed to Product	Lithograph Paper glued Stenciled	Other		
	-	Section - IV			
		Title	le Teleph		<i>this application.)</i> one No. (Include Area Code) 32-2391
I certify that the statemen	is I have made on this form a lowingly false or misleading s	ertification and all attachments thereto	are true, accurate ar	nd complete.	6. Date Application Fréceived , (Stamped)
2. Signature	Wing	3. Title Senior Regulatory	Manager		
4. Typed Name Robert E. M. Wurz		5. Date October 15, 1999			
	Previous editions are obsolet				<u></u>

**NOTIFICATION** 

OCT 2 9 1999

(10/5/99)

# RESTRICTED USE PESTICIDE

TOXIC TO FISH, MAMMALS, 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.

# Proclaim®

For control of certain lepidopterous larvae (worms/caterpillars) on head and stem *Brassica* vegetables, celery and head lettuce

Active Ingredient:

Emamectin benzoate (CAS No. 137512-74-4)	5.0%
Other Ingredients:	95.0%
Total:	100.0%

Proclaim is a water-dispersible granule containing 5% active ingredient.

# KEEP OUT OF REACH OF CHILDREN.

# CAUTION

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 additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-904

EPA Est. 67545-AZ-001

550 GRAMS (1.21 POUNDS) NET CONTENTS

NCP 904A-L1C 1099

# 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 field use and tests. 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 (U.S.A.) 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 48 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
- Protective eyewear

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

## **GENERAL INFORMATION**

Proclaim is a selective insecticide for the control of the larval stages (worms/caterpillars) of certain lepidopteran species on head and stem *Brassica* vegetables, celery and head lettuce. Although Proclaim has some contact activity, it should be ingested by larvae to be most effective. Affected larvae become paralyzed and stop feeding shortly after exposure to Proclaim, and subsequently die after 2-4 days.

Apply Proclaim to plant foliage when larvae first appear, but before populations build to damaging levels. Applications of Proclaim should be targeted at small (1/4 inch in length) larvae.

Thorough spray coverage is essential for optimum performance. Apply Proclaim 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 of Proclaim** section of this label for specific recommendations on spray volumes for different crops.

The use of a penetrating type spray adjuvant, at the manufacturer's suggested rate, is recommended with all applications of Proclaim. The use of an adjuvant typically improves coverage and penetration and results in optimum insect control, especially in crops with hard to wet leaf surfaces. However, do not use sticker/binder type adjuvants because they may reduce translaminar movement of the active ingredient into the plant.

Proclaim has been tested for phytotoxicity and has a wide margin of safety on the crops listed on this label.

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

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 drift to blooming crops or weeds if bees are visiting the treatment area.

## APPLICATION PROCEDURES

## **Ground Spray Equipment**

Spray nozzles should be uniformly spaced and of the same size, and should provide accurate and uniform application. Use spray nozzles which provide medium-sized droplets. To help assure accuracy, calibrate sprayer before each use. For information on spray equipment and cali-

-• \* - - - -• - - bration, consult sprayer manufacturers and/or state recommendations. All ground application equipment must be properly maintained and calibrated using appropriate carriers.

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

#### **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 rinsate to a previously treated area. Keep product container tightly closed when not in use.

**Proclaim Alone:** Add 1/3 of the required amount of water to the spray or mixing tank. With the agitator running, add the Proclaim into the spray tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the Proclaim has completely 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 Proclaim.

**Proclaim + Tank Mixtures:** Add 1/3 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), 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 Proclaim in tank mixtures, all products in water-soluble packaging should be added to the tank before any other tank mix partner, including Proclaim. 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 Proclaim 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:** Proclaim is compatible with most insecticide, fungicide, and foliar nutrients products. However, the physical compatibility of Proclaim with tank mix partners should be tested before use. To determine the physical compatibility of Proclaim with other products, use a jar test as described below.

Using a 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.

**Note:** 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.

#### **Recommendations to Avoid Spray Drift**

OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS; MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS

Do not apply by ground within 25 feet of lakes; reservoirs; rivers; permanent streams, marshes or natural ponds; estuaries and commercial fish farm ponds.

Make ground application when wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 10 mph. Avoid applications when wind gusts approach 10 mph.

Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Do not cultivate within 25 feet of the aquatic area as to allow growth of a vegetative filter strip.

Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of spray drift to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.

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Do not make ground applications during 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.

## Chemigation

Do not apply this product through any type of irrigation system.

## **Aerial Application**

Do not apply this product by aircraft.

## **RESISTANCE MANAGEMENT**

Because of the inherent risks of resistance development to any product, it is strongly advised that Proclaim be used in a sound resistance management program which includes rotation with other products with different modes of action.

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## **Recommended Applications of Proclaim**

Сгор	Pest	Rate Per Acre Per Application	Remarks
Head and Stem Brassica Vegetables Cabbage Broccoli Cauliflower Brussels sprouts Chinese (napa) cabbage Chinese broccoli Cavalo broccolo Chinese mustard cabbage Kohlrabi	Beet armyworm Cabbage webworm Corn earworm Cross-striped cabbageworm Diamondback moth Fall armyworm Imported cabbageworm	Foliar application: 2.4-4.8 oz./A	Apply when larvae are first observed and repeat appli- cations as necessary to maintain control. Use 2.4 oz./A for low to moderate infestations and 4.8 oz./A for severe infestations.
	Soybean looper Cabbage looper	Foliar application: 3.2-4.8 oz./A	Apply when larvae are first observed and repeat appli- cations as necessary to maintain control. Use 3.2 oz./A for low to moderate infestations and 4.8 oz./A for severe infestations.
Head Lettuce Celery	Beet armyworm Fall armyworm Corn earworm Tobacco budworm <i>Liriomyza</i> leafminers'	Foliar application: 2.4-4.8 oz./A	Apply when larvae are first observed and repeat appli- cations as necessary to maintain control. Use 2.4 oz./A for low to moderate infestations and 4.8 oz./A for severe infestations.
	Soybean looper Cabbage looper	Foliar application: 3.2-4.8 oz./A	Apply when larvae are first observed and repeat applications as necessary to maintain control. Use 3.2 oz./A for low to moderate infestations and 4.8 oz./A for severe infestations.

<sup>1</sup>Proclaim provides suppression of *Liromyza trifolii* and *Liromyza sativae* populations. Suppression means either erratic control ranging from good to poor, or consistent control at a level below which is generally considered acceptable for commercial control.

Do not apply at rates lower than those recommended on this label.

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 with Proclaim applied by ground. The use of a penetrating type spray adjuvant at the manufacturer's suggested rate, is recommended to provide optimum coverage and insect control. Do not use a sticker/binder type adjuvant.

Do not make more than two sequential applications for worm control or leafminer suppression without rotating to another insect control product with a different mode of action.

Do not apply by aircraft.

Do not apply more than 4.8 oz./A per application. Do not exceed a total of 28.8 oz./A per crop per season.

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

Do not graze livestock in treated areas.

# **ROTATIONAL RESTRICTIONS**

There are no rotational (plantback) restrictions with Proclaim. Treated areas may be replanted with any crop as soon as practical following the last application.

## STORAGE AND DISPOSAL

## Storage

Store in a tightly closed original container in a cool, dry place.

## **Prohibitions**

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

#### 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 other procedures approved by state and local authorities.

#### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

### CAUTION

Causes moderate eye irritation. Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with the skin, eyes, or clothing. Avoid breathing dust or spray mist. Prolonged or frequently repeated exposure may cause allergic skin reactions in some individuals.

## First Aid

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

**If swallowed:** Call a physician or Poison Control Center immediately. Drink 1 or 2 glasses of water and induce vomiting by gently touching the back of the throat with finger. Repeat until vomit fluid is clear. Do not

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induce vomiting or give anything by mouth to an unconscious person.

**If inhaled:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

If on skin: Remove contaminated clothing and wash affected areas with soap and water. Get medical attention if irritation persists.

**Recommendations for Medical Treatment for Emamectin Benzoate Acute Toxicity:** Early signs of intoxication include mydriasis (dilated pupils), ataxia (unsteadiness), and muscle tremors. Toxicity following accidental ingestion of the concentrate can be minimized by inducing vomiting within one-half hour of exposure. If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels) as indicated by clinical signs, symptoms, and measurements.

In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since emamectin benzoate is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic emamectin benzoate exposure.

For 24-hour emergency information, call 1-800-888-8372.

## **Personal Protective Equipment**

#### Applicators and other handlers must wear:

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

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, use detergent and hot water. Keep and wash PPE separately from other laundry. 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 clothes immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

## **Environmental Hazards**

This pesticide is toxic to fish, birds, mammals, and aquatic invertebrates. 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 or rinsate.

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 drift to blooming crops or weeds if bees are visiting the treatment area.

#### **Physical or Chemical Hazards**

Do not use or store near heat or open flame.

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Novartis Crop Protection, Inc. Greensboro, North Carolina 27419 NCP 904A-L1C 1099

[QUARK/PROCLAIM/PROCLAIM-RW] - ccg - 10/11/99

(BASE LABEL)

# RESTRICTED USE PESTICIDE

TOXIC TO FISH, MAMMALS, AND AQUATIC ORGANISMS

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EPA Reg. No. 100-904

EPA Est. 67545-AZ-001

Made in U.S.A.

550 GRAMS (1.21 POUNDS) NET CONTENTS

## 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.

#### **Precautionary Statements**

#### Hazards to Humans and Domestic Animals

## CAUTION

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Refer to **First Aid** section in attached booklet for additional precautionary statements.

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