

Mr. Robert M. Sielaty  
UCB Chemicals Corporation  
c/o Compliance Services International  
22202 Jefferson Davis Highway #1010  
Arlington, VA 22202-3603

MAY 26 1995

Dear Mr. Sielaty:

Subject: Ziram Granuflo  
EPA File Symbol 45728-12  
Applications Dated May 1, 1995, May 15, 1995 and  
May 23, 1995, Requests to Clarify Use Patterns and  
revise the Confidential Statement of Formula

The revised basic formula submitted on EPA Form 6570-4 dated May 26, 1995 has been reviewed and found acceptable as an amendment to the subject pesticide product registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended. A copy of the formula has been placed in this Agency's file for this pesticide product registration.

The labeling submitted with your May 15, 1995 application to amend the subject pesticide product registration has been reviewed and is acceptable under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) as amended, provided that you:

- o Submit one (1) copy of the final printed label before releasing the product for shipment.

If this condition is not complied with the registration will be subject to cancellation in accordance with FIFRA, Section 6(e). Your release for shipment of the product constitutes acceptance of this condition.

A stamped copy of the labeling is enclosed for your records.

Sincerely yours,

Joanne I. Miller  
Product Manager (23)  
Fungicide-herbicide Branch  
Registration Division (7505C)

CONCURRENCES							
SYMBOL	ENCLOSURE						
	Wilson; Diskette	AUC21:05-26-95					
SURNAME							
DATE							



# Ziram Granuflo<sup>®</sup>

## Fungicide

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(The Original 76% Water Dispersible Granules)

EPA Reg. No. 46728-12..... EPA Est. 32667-BEL-1

Active Ingredient:	
Ziram (zinc dimethyl dithiocarbamate).....	76.0%
Inert Ingredients:.....	24.0%
	<b>TOTAL 100.0%</b>
Zinc expressed as metallic.....	16.25%

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

**MAY 26 1995**

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

46728-12

**KEEP OUT OF REACH OF CHILDREN**

**DANGER - PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique detalle.  
(If you do not understand the label, find someone to explain it to you in detail.)

### STATEMENT OF PRACTICAL TREATMENT

**IF IN EYES:** Hold eyelids open and immediately flush eyes with a steady stream of water for at least 15 minutes. Get medical attention.

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

**IF SWALLOWED:** Call a physician or Poison Control Center. Drink 1 to 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

**NOTE TO THE PHYSICIAN:** Possible mucosal damage may contraindicate gastric lavage.

**IF ON SKIN:** Remove contaminated clothing. Wash thoroughly with plenty of soap and water. Get medical attention.

For Emergencies Involving a Spill, Leak, Fire, Exposure, or Accident,  
Contact: CHEMTREC at (800) 424-9300.

For Other Emergencies, phone (404) 801-3248 or (404) 433-6421.

Other Panels for Additional Precautionary Statements.

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER:** Corrosive. Causes irreversible eye damage. May be fatal if inhaled. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Do not breathe dust or spray mist. Harmful if swallowed or absorbed through the skin. May cause irritation of nose and throat.

Applicators and other handlers must wear:

- ◆ Long-sleeved shirt and long pants
- ◆ Waterproof gloves
- ◆ Shoes plus socks
- ◆ Protective eye wear
- ◆ Chemical-resistant headgear for overhead exposure
- ◆ Dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C)

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 Personal Protection Equipment (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 air-raft 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.

#### Use Safety Recommendations:

##### Use 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.
- ◆ Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### Environmental Hazards

This product is toxic to fish and wildlife. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwaters. Apply this product only as specified on this label.

#### Physical or Chemical Hazards

Keep away from fire and sparks.

Read entire label carefully and use only as directed.

#### 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.

Damages: Buyer's or user's exclusive remedy for damages for breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid and shall not include incidental or consequential damages.

## 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 (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 eye wear
- ◆ Chemical-resistant headgear for overhead exposure

## STORAGE AND DISPOSAL

### Pesticide Storage

Store away from fire and sparks.

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. Do not put concentrate or dilute material into food or drink containers. Do not contaminate water, food or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills.

For Emergencies Involving a Spill, Leak, Fire, Exposure, or Accident, contact: CHEMTREC at (800) 424-9300.

For Other Emergencies, phone (404) 881-3247 or (404) 433-6421.

To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter, or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

### Pesticide Disposal

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### Container Disposal

Completely empty container into application equipment. Then dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Dealers Should Sell in Original Packages Only.

Terms of Sale or Use. On purchase of this product, buyer and user agree to the following conditions:

Warranty: UCB makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Except as so warranted, the product is sold as is. Buyer and user assume all risk of use and/or handling and/or storage of this material when such use and/or handling and/or storage is contrary to label instructions.

Directions and Recommendations: Follow directions carefully. Timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller and are assumed by buyer at his own risk.

## General Use Information

Ziram Granuflo® is a broad spectrum fungicide for the control of certain diseases in fruit and nut crops, and ornamentals. UCB's recommendations for the use of this product are based upon tests believed to be reliable. The use of the product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practices.

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

## Application Equipment and Rates

See following pages for specific crop information.

Use recommended rates for concentrate, dilute and aerial applications. Ground application is preferred, especially when full canopy of foliage is developed.

Be sure spray equipment is clean before use. If it is contaminated with any material, crop injury or sprayer clogging may result. Calibrate spray equipment before use.

For dilute application, use Ziram Granuflo® at the recommended rates per 100 gallons.

For concentrate ground application, apply the recommended rate in a minimum of 20 gallons per acre. By air, use a minimum of 10 gallons per acre.

Under low disease conditions, minimum label rates per application can be used while maximum label rates and shortened spray schedules are recommended for severe or threatening disease conditions.

Do not graze or feed cover crops from treated orchards

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

## Mixing Instructions

To mix, fill the spray tank about 2/3 full of water, and with agitator running, slowly sift in the required amount of Ziram Granuflo®. Finish filling the tank with water and let mixing continue in the tank until thoroughly mixed before applying. Continue agitation and apply immediately.

**IMPORTANT:** When spraying, thorough coverage is necessary to provide good disease control. Make new dilutions for each spraying. Consult State Agricultural Experiment Station recommendations or State Extension Service Specialist for spray schedules for timing and frequency of applications in your area.

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ZIRAM GRANUFLO® APPLICATION INFORMATION SPECIFIC TO CROP

FRUIT AND NUT TREE CROPS	APPLICATION INFORMATION	DISEASES	DIRECTIONS FOR USE
ALMONDS	LBS/A 8 lbs	Brown Rot Blossom Blight Leaf Blight Scab Shot Hole (Coryneum Blight) Twig Blight	Apply pre-bloom through petal fall periods. Do not apply later than 5 weeks after petal fall.
APPLES	LBS/A 6 to 8 lbs	Apple Scab  Bull's-Eye Rot (Pacific Northwest only)  Perennial Canker (Oregon only)	Apply from pre-bloom through early cover sprays needed.  Apply 12 to 14 days after calyx stage and repeat as necessary in summer sprays.  Apply pre-bloom and calyx sprays.
APRICOTS	LBS/A 8lbs	Brown Rot Blossom Blight Shot-Hole (Coryneum Blight) Twig Blight	Apply in pre-bloom, bloom and petal fall through early cover sprays.
CHERRIES	LBS/A 4 - 5 lbs  PHI 7days	Brown Rot Blossom Blight	Apply in pre-bloom, bloom, petal fall and shuck stages, and approximately 2 weeks after shuck fall.
PEACHES AND NECTARINES	LBS/A 6 to 8 lbs	Brown Rot  Peach Leaf Curl  Peach Blight (Coryneum)	Apply at pre-bloom through cover sprays or as needed.  Make dormant applications after leaf drop and/or prior to bud swell.  In addition to spray program, apply 8 lbs per acre in the fall before the heavy rains.
PEARS	LBS/A 6 to 8 lbs	Pear Scab  Storage Rots (Oregon only)	Apply from pre-bloom through early cover sprays as needed.  Apply as a pre-harvest spray.
PECANS	LBS/A 8 lbs APP. INTERVAL 21 - 28 days	Pecan Scab	Apply once when tips of small nuts become brown and up to 4 more times as needed. Do not apply after August.

ZIRAM GRANUFLO® APPLICATION INFORMATION SPECIFIC TO CROP

ORNAMENTAL CROPS **	APPLICATION INFORMATION	DISEASES	DIRECTIONS FOR USE	
Asters	LBS/12 GAL H <sub>2</sub> O APP. INTERVAL	1 lb product 7 days	Rust	Begin application in early season and continue as needed until blossoms form.
Azaleas Camellias	LBS/100 GAL H <sub>2</sub> O APP. INTERVAL	1 1/2 to 2 lbs product 3 to 5 days	Petal Blight	Begin application with first bloom. Apply as drench to mulch and litter beneath and around bushes through bloom period.
Carnations * Chrysanthemums * Marigolds Morning Glory Snapdragons *	LBS/100 GAL H <sub>2</sub> O APP. INTERVAL	1 2/3 to 2 lbs product 7 to 10 days	Rust	Apply as needed throughout the growing season.  * See additional disease control listings.
Carnations * Chrysanthemums * Dahlias * Gladolus Snapdragons *	LBS/100 GAL H <sub>2</sub> O APP. INTERVAL	1 2/3 to 2 lbs product 7 days	Leaf Spot	Apply as needed throughout the growing season.  * See additional disease control listings.
Cyclamens Gardenias	LBS/100 GAL H <sub>2</sub> O APP. INTERVAL	1 1/2 to 2 lbs product 7 to 10 days	Botrytis Leaf Spot	Apply as needed throughout the growing season.
Dahlias * Delphinium Golden Glow Hollyhocks Phlox	LBS/100 GAL H <sub>2</sub> O APP. INTERVAL	1 2/3 lbs product 7 days	Powdery Mildew	Apply as needed throughout the growing season.  * See additional disease control listings.
Lilies Peonies Poinsettias Tulips	LBS/100 GAL H <sub>2</sub> O APP. INTERVAL	1 1/2 to 2 lbs product 7 to 10 days	Botrytis	Apply as needed throughout the growing season.
Roses	LBS/100 GAL H <sub>2</sub> O APP. INTERVAL	1 2/3 lbs product 7 to 10 days	Black Spot Powdery Mildew	Begin application when leaves unfold. Apply as needed throughout the season.
ORNAMENTAL TREES AND FRUIT**	APPLICATION INFORMATION	DISEASES	DIRECTIONS FOR USE	
Conifers * Pine Seedlings	LBS/100 GAL H <sub>2</sub> O APP. INTERVAL	2 lbs product 3 to 5 days	Fusiform Rust	Apply from plant emergence to mid-June
Douglas Fir Christmas Trees	LBS/100 GAL H <sub>2</sub> O	2 lbs product	Melampsora Needle Rust	Make one application in the spring when new shoot growth is 1/2 to 2 inches in length.
Shasta Fir Christmas Trees	LBS/100 GAL H <sub>2</sub> O	2 lbs product	Pucciniastrum Needle Rust	Make a single application in the spring when new shoot growth is 1/2 to 2 inches in length.

\*\*NOT FOR USE IN CALIFORNIA

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## ZIRAM GRANUFLO® APPLICATION INFORMATION SPECIFIC TO CROP

ORNAMENTAL TREES AND FRUIT™	APPLICATION INFORMATION	DISEASES	DIRECTIONS FOR USE
Apple Pear	LBS/100 GAL H <sub>2</sub> O 2 to 3 lbs product	Anthracnose ( <i>Pezizula malicorticis</i> ) European (Nectria) Canker ( <i>Nectria galligena</i> )	Apply as a thorough coverage spray in the fall and dormant periods. <b>DO NOT USE FRUIT FOR HUMAN CONSUMPTION</b>
Flowering Crab Apple Oregon Crab Quince	LBS/100 GAL H <sub>2</sub> O 2 to 3 lbs product	Anthracnose ( <i>Pezizula malicorticis</i> )	Apply as a thorough coverage spray in the fall and dormant periods. <b>DO NOT USE FRUIT FOR HUMAN CONSUMPTION</b>
Sweet Cherry Wild Cherry Choke Cherry Cherry laurel Flowering Plum (non-edible only)	LBS/100 GAL H <sub>2</sub> O 2 to 3 lbs product	Witches' Broom, Leaf Curl, Plum pockets ( <i>Taphrina</i> spp.)	Apply as a thorough coverage spray in the dormant period prior to bud swell. <b>DO NOT USE FRUIT FOR HUMAN CONSUMPTION</b>
Peach  Apricot	LBS/100 GAL H <sub>2</sub> O 2 to 3 lbs product	Twig blight ( <i>Diplodia</i> ) Leaf curl ( <i>Taphrina deformans</i> )	Apply as a thorough coverage spray in the dormant period prior to bud swell. <b>DO NOT USE FRUIT FOR HUMAN CONSUMPTION</b>
nectarine	LBS/100 GAL H <sub>2</sub> O 2 to 3 lbs product	Leaf curl ( <i>Taphrina deformans</i> ) Shot hole ( <i>Stigmina carpophila</i> )	Apply as a thorough coverage spray in the dormant period prior to bud swell. <b>DO NOT USE FRUIT FOR HUMAN CONSUMPTION</b>
American Hornbeam	LBS/100 GAL H <sub>2</sub> O 2 to 3 lbs product	Leaf blister ( <i>Taphrina australis</i> )	Apply as a thorough coverage spray in the dormant period prior to bud swell.
Elm Birch Maple	LBS/100 GAL H <sub>2</sub> O 2 to 3 lbs product	Leaf blister ( <i>Taphrina</i> spp.)	Apply as a thorough coverage spray in the dormant period prior to bud swell.
California Buckeye	LBS/100 GAL H <sub>2</sub> O 2 to 3 lbs product	Yellow Leaf blister ( <i>Taphrina aesculi</i> )	Apply as a thorough coverage spray in the dormant period prior to bud swell.
Oak	LBS/100 GAL H <sub>2</sub> O 2 to 3 lbs product	Leaf blister ( <i>Taphrina caenulescens</i> )	Apply as a thorough coverage spray in the dormant period prior to bud swell.
Alder	LBS/100 GAL H <sub>2</sub> O 2 to 3 lbs product	Leaf curl, Catkin hypertrophy ( <i>Taphrina</i> spp.)	Apply as a thorough coverage spray in the dormant period prior to bud swell.
Poplar	LBS/100 GAL H <sub>2</sub> O 2 to 3 lbs product	Yellow Leaf blister ( <i>Taphrina populina</i> ) Shoot blight ( <i>Venturia populina</i> )	Apply as a thorough coverage spray in the dormant period prior to bud swell.

\*\*NOT FOR USE IN CALIFORNIA



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Smyrna, Georgia 30080

Granuflo® is a Registered Trademark of UCB S.A., a Belgian corporation.