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Systems Integration Group, Inc.

Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0060. Approval expires 2-28-95



United States
Environmental Protection Agency
Washington, DC 20460

Registration
 Amendment
 Other

OPP Identifier Number
264516

Application for Pesticide - Section I

1. Company/Product Number 45728-12	2. EPA Product Manager C. Parker	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Zipam Granuflo	PM# 22	
5. Name and Address of Applicant (Include ZIP Code) UCB Chemicals Corporation 2000 Lake Park Dr. Smyrna, GA 30080 <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.

NOTIFICATION
FEB 22 1999

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Notification of the addition of tables which present the same use directions already approved by EPA in narrative form (M.2.)² as per PR Notice 98-10

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 type="checkbox"/> Metal	<input type="checkbox"/> Plastic
				<input type="checkbox"/> Glass	<input checked="" type="checkbox"/> Paper
				<input type="checkbox"/> Other (Specify) _____	
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	No. per container
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 40 lb.		5. Location of Label Directions <input checked="" type="checkbox"/> on 1 side	
6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph Paper, glued <input type="checkbox"/> Stenciled		<input type="checkbox"/> Other _____			

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Timothy A. Dotson	Title Regulatory Affairs Mgr.	Telephone No. (Include Area Code) 770-926-1139
2. Signature 		6. Date Application Received (Stamped)
3. Title Regulatory Affairs Manager		
4. Typed Name Timothy A. Dotson		
5. Date 2/12/99		

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.



Ziram Granuflo®

2/7

Fungicide

(The Original 76% Water Dispersible Granules)

NOTIFICATION

FEB 22 1999

ACTIVE INGREDIENT:

Ziram (zinc dimethyl dithiocarbamate)*.....76.0%

INERT INGREDIENTS:.....24.0%

TOTAL 100.0%

*Zinc expressed as metallic.....16.25%

EPA Reg. No. 45728-12

EPA Est. 32557-BEL-1

KEEP OUT OF REACH OF CHILDREN

DANGER - PELIGRO

**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.)**

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 (770) 801-3248 or (770) 433-6421.

See 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.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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.

ZiramGranuflo/40lbs
09/28/98TAD(EPA07/07/98, CDPR xxx)

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:

- User 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.

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.

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

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.

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

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

DIRECTIONS AND RECOMMENDATIONS

IMPORTANT: When spraying, thorough coverage is necessary to provide good disease control. Make new dilutions for each spraying.

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.

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

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. For aerial application, use a minimum of 10 gallons per acre.

Under low disease conditions, minimum label rates per application should be used, however, 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.

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. Continue agitation and apply immediately.

STORAGE AND DISPOSAL

Pesticide Storage

Keep 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 (770) 801-3248 or (770) 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.

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.

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.

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

NET WEIGHT: 40 LBS.



Chemicals Corporation
2000 Lake Park Drive
Smyrna, Georgia 30080

ZIRAM GRANUFLO® APPLICATION INFORMATION SPECIFIC TO CROP

FRUIT AND NUT TREE CROPS	DISEASES	POUNDS ZIRAM GRANUFLO®		DIRECTIONS FOR USE
		per acre	per 100 gal	
ALMONDS	Brown Rot Blossom Blight and Twig Blight (Monilinia spp.) Leaf Blight (Seimatosporium lichenicola) Scab (Cladosporium carpophilum) Shot Hole (Coryneum Blight) (Stigmata carpophilum)	8 lbs	2 2/3 lbs ⁽³⁾	Apply pre-bloom through petal fall periods. Do not apply later than 5 weeks after petal fall. Do not apply more than 32 lbs/A per crop cycle. ⁽⁴⁾
APPLES	Apple Scab (Venturia inaequalis) Cedar Apple Rust ⁽¹⁾ , Quince Rust ⁽¹⁾ (Gymnosporangium spp.) Sooty Blotch ⁽¹⁾ (Gloeodes pomigena) Fly Speck ⁽¹⁾ (Schizothyrium perexiguum) Bitter Rot ⁽¹⁾ (Glomerella cingulata)	6 to 8 lbs	1 1/2 to 2 lbs ⁽²⁾	Apply from pre-bloom through early cover sprays as needed. Do not apply within 14 days of harvest. Eastern U.S.: Do not apply more than 56 lbs/A per crop cycle. ⁽⁴⁾ Western U.S.: Do not apply more than 32 lbs/A per crop cycle. ⁽⁴⁾
	Bull's-Eye Rot (Pacific Northwest only) (Pezizula malicorticis)	6 to 8 lbs	1 1/2 to 2 lbs ⁽²⁾	Apply 12 to 14 days after calyx stage and repeat as necessary in summer sprays. Do not apply within 14 days of harvest. Do not apply more than 32 lbs/A per crop cycle. ⁽⁴⁾
	Perennial Canker (Oregon only) (Neofabraea perennans)	6 to 8 lbs	1 1/2 to 2 lbs ⁽²⁾	Apply pre-bloom and calyx sprays. Do not apply more than 32 lbs/A per crop cycle. ⁽⁴⁾
APRICOTS	Brown Rot Blossom Blight, Twig Blight and Fruit Rot (Monilinia spp.) Shot-Hole (Stigmata carpophila)	6 to 8 lbs (except CA) 8 lbs (CA only)	1 1/2 to 2 2/3 lbs ⁽³⁾ 2 2/3 lbs	Apply in pre-bloom, bloom and petal fall through early cover sprays. Do not apply within 30 days of harvest. Do not apply more than 40 lbs/A per crop cycle. ⁽⁴⁾
CHERRIES Eastern U.S.	Brown Rot Blossom Blight, Twig Blight and Fruit Rot (Monilinia spp.) Leaf Spot (Blumeriella jaapii)	5 to 8 lbs	1 2/3 to 2 2/3 lbs ⁽³⁾	Apply in pre-bloom, bloom, petal fall and shuck stages, and approximately 2 weeks after shuck fall. Do not apply within 14 days of harvest. Do not apply more than 40 lbs/A per crop cycle. ⁽⁴⁾
CHERRIES Western U.S.	Brown Rot Blossom Blight, Twig Blight and Fruit Rot (Monilinia spp.) Leaf Spot ⁽¹⁾ (Blumeriella jaapii)	4 to 6 lbs (except CA) 4 to 5 lbs (CA only)	1 1/3 to 2 lbs ⁽³⁾ 1 1/3 to 1 2/3 lbs ⁽³⁾	Apply at pre-bloom, bloom, petal fall and shuck stages, and approximately 2 weeks after shuck fall. Do not apply more than 30 lbs/A per crop cycle. ⁽⁴⁾ Do not apply within 30 days of harvest. (except California) Do not apply within 7 days of harvest. (California only)
PEACHES AND NECTARINES Eastern U.S.	Brown Rot Blossom Blight, Twig Blight and Fruit Rot (Monilinia spp.)	4 1/2 to 8 lbs	1 1/2 to 2 2/3 lbs ⁽³⁾	Apply at pre-bloom through cover sprays as needed. Do not apply within 14 days of harvest. Do not apply more than 72 lbs/A per crop cycle. ⁽⁴⁾
	Peach Blight (i.e. Shot Hole) (Stigmata carpophila)	4 1/2 to 8 lbs	1 1/2 to 2 2/3 lbs ⁽³⁾	Apply at pre-bloom through cover sprays as needed. In addition to spray program, apply 8 lbs/A in the fall before the heavy rains. Do not apply within 14 days of harvest. Do not apply more than 72 lbs/A per crop cycle. ⁽⁴⁾
	Peach Leaf Curl (Taphrina deformans)	3 3/4 to 8 lbs	1 1/4 to 2 2/3 lbs ⁽³⁾	Make dormant applications after leaf drop and/or prior to bud swell. Do not apply more than 72 lbs/A per crop cycle. ⁽⁴⁾
PEACHES AND NECTARINES Western U.S.	Brown Rot Blossom Blight, Twig Blight and Fruit Rot (Monilinia spp.)	6 to 8 lbs (except CA) 8 lbs (CA only)	1 1/2 to 2 2/3 lbs ⁽³⁾ 2 2/3 lbs ⁽³⁾	Apply at pre-bloom through cover sprays as needed. Do not apply within 30 days of harvest. Do not apply more than 56 lbs/A per crop cycle. ⁽⁴⁾
	Peach Blight (i.e. Shot Hole) (Stigmata carpophila)	6 to 8 lbs (except CA) 8 lbs (CA only)	1 1/2 to 2 2/3 lbs ⁽³⁾ 2 2/3 lbs ⁽³⁾	Apply at pre-bloom through cover sprays as needed. In addition to preharvest spray program, apply 8 lbs/A in the fall (after harvest) before the heavy rains. Do not apply within 30 days of harvest. Do not apply more than 56 lbs/A per crop cycle. ⁽⁴⁾
	Peach Leaf Curl (Taphrina deformans)	8 to 10 lbs (except CA) 8 lbs (CA only)	2 2/3 to 3 1/3 lbs ⁽³⁾ 2 2/3 lbs ⁽³⁾	Make dormant applications in late fall after leaf drop and/or in late winter prior to bud swell. Do not apply more than 56 lbs/A per crop cycle. ⁽⁴⁾

(1) Not for use in California.
 (2) Based on dilute sprays of 400 gallons per acre.
 (3) Based on dilute sprays of 300 gallons per acre.
 (4) Crop cycle is defined as pre-bloom through post-harvest.

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ZIRAM GRANUFLO® APPLICATION INFORMATION SPECIFIC TO CROP

FRUIT AND NUT	POUNDS ZIRAM GRANUFLO®		DIRECTIONS FOR USE		
TREE CROPS	DISEASES	per acre per 100 gal			
PEARS	Pear Scab (<i>Venturia pyrina</i>) Quince Rust (1) (Gymnosporangium spp.) Sooty Blotch (1) (<i>Gloeodes pomigena</i>) Fly Speck (1) (<i>Schizothyrium pomi</i>) Bitter Rot (1) (<i>Glomerella cingulata</i>) Fabraea Leaf Spot (1) (Diplocarpon mespili)	6 to 8 lbs	1 1/2 to 2 lbs(2)	Apply from pre-bloom through cover sprays as needed. Eastern U.S.: Do not apply within 14 days of harvest. Do not apply more than 56 lbs/A per crop cycle. (4) Western U.S.: Do not apply within 5 days of harvest. Do not apply more than 32 lbs/A per crop cycle. (4)	
	Bull's-Eye Rot (Pacific Northwest only) (Pezizula malicorticis)	6 to 8 lbs	1 1/2 to 2 lbs(2)		Apply in the first cover spray and in pre-harvest spray before fall rains begin. Repeat as necessary, especially if excessive rainfall occurs. Do not apply within 5 days of harvest. Do not apply more than 32 lbs/A per crop cycle. (4)
	Storage Rot (Oregon only) (Phialophora malorum)	6 to 8 lbs	1 1/2 to 2 lbs(2)		
PECANS	Pecan Scab (<i>Cladosporium effusum</i>) Anthracnose (<i>Glomerella cingulata</i>)	6 to 8 lbs	1 1/2 to 2 2/3 lbs(3)	Apply up to 3 times beginning when leaves are 1/4 to 1/2 in. long through pollination. Apply up to 5 more cover sprays at 3 to 4 week intervals beginning after pollination. Do not apply within 55 days of harvest. Do not apply more than 64 lbs/A per crop cycle. (4)	
ORNAMENTAL CROPS(1)					
Asters	Rust (<i>Puccinia</i> spp.)		1 1/2 to 2 lbs	Begin application early in the growing season and continue every 7 days as needed until blossoms form.	
Azaleas Camellias	Petal Blight (<i>Pestalotia</i> spp.)		1 1/2 to 2 lbs	Begin application with first bloom. Apply at 3 to 5 day intervals as a drench to mulch and litter beneath and around bushes through bloom period.	
Carnations Chrysanthemums Marigolds Morning Glory Snapdragons	Rust (<i>Puccinia</i> spp.)		1 2/3 to 2 lbs	Apply at 7 to 10 day intervals as needed throughout the growing season.	
Carnations Chrysanthemums Dahlias Gladiolus Snapdragons	Leaf Spot (<i>Alternaria</i> spp.)		1 2/3 to 2 lbs	Apply at 7 day intervals as needed throughout the growing season.	
Cyclamens Gardenias	Botrytis Blight (<i>Botrytis</i> spp.) Leaf Spot (<i>Phyllostica</i> spp.)		1 1/2 to 2 lbs	Apply at 7 to 10 day intervals as needed throughout the growing season.	
Dahlias Delphinium Golden Glow Hollyhocks Phlox	Powdery Mildew (<i>Erysiphe cichoracearum</i>)		1 2/3 to 2 lbs	Apply at 7 day intervals as needed throughout the growing season.	
Lilies Peonies Poinsettias Tulips	Botrytis Blight (<i>Botrytis</i> spp.)		1 1/2 to 2 lbs	Apply at 7 to 10 day intervals as needed throughout the growing season.	
Roses	Black Spot (<i>Diplocarpon rosae</i>) Powdery Mildew (<i>Sphaerotheca</i> spp.)		1 2/3 to 2 lbs	Begin application when leaves unfold. Apply at 7 to 10 day intervals as needed throughout the growing season.	

- (1) Not for use in California.
- (2) Based on dilute sprays of 400 gallons per acre.
- (3) Based on dilute sprays of 300 gallons per acre.
- (4) Crop cycle is defined as pre-bloom through post-harvest.

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ZIRAM GRANUFLO® APPLICATION INFORMATION SPECIFIC TO CROP

ORNAMENTAL TREES AND FRUIT(1)	DISEASES	POUNDS ZIRAM GRANUFLO®		DIRECTIONS FOR USE
		per acre	per 100 gal	
Conifers Pine Seedlings	Fusiform Rust		2 lbs	Apply at 3 to 5 day intervals from plant emergence to mid-June.
Douglas Fir Christmas Trees	Melampsora Needle Rust		2 lbs	Make one application in the spring when new shoot growth is 1/2 to 2 inches in length.
Shasta Fir Christmas Trees	Puccineastrum Needle Rust		2 lbs	Make a single application in the spring when new shoot growth is 1/2 to 2 inches in length.
Apple Pear	Anthracnose (Pezicula malicorticis) European (Nectria) Canker Fusiform Rust		2 to 3 lbs	Apply as a thorough coverage spray in the fall and dormant periods. DO NOT USE FRUIT FOR HUMAN CONSUMPTION.
Flowering Crab Apple Oregon Crab Quince	Anthracnose (Pezicula malicorticis)		2 to 3 lbs	Apply as a thorough coverage spray in the fall and dormant periods. DO NOT USE FRUIT FOR HUMAN CONSUMPTION.
Sweet Cherry Wild Cherry Choke Cherry Cherry laurel Flowering Plum (non-edible only)	Witches' Broom, Leaf Curl, Plum Pockets (Taphrina spp.)		2 to 3 lbs	Apply as a thorough coverage spray in the dormant period prior to bud swell. DO NOT USE FRUIT FOR HUMAN CONSUMPTION.
Peach Apricot	Twig Blight (Monilinia spp.) Leaf Curl (Taphrina deformans)		2 to 3 lbs	Apply as a thorough coverage spray in the dormant period prior to bud swell. DO NOT USE FRUIT FOR HUMAN CONSUMPTION.
Nectarine	Leaf Curl (Taphrina deformans) Shot Hole (Stigmata carpophila)		2 to 3 lbs	Apply as a thorough coverage spray in the dormant period prior to bud swell. DO NOT USE FRUIT FOR HUMAN CONSUMPTION.
American Hornbeam	Leaf Blister (Taphrina australis)		2 to 3 lbs	Apply as a thorough coverage spray in the dormant period prior to bud swell.
Elm Birch Maple	Leaf Blister (Taphrina spp.)		2 to 3 lbs	Apply as a thorough coverage spray in the dormant period prior to bud swell.
California Buckeye	Yellow Leaf Blister (Taphrina aesculi)		2 to 3 lbs	Apply as a thorough coverage spray in the dormant period prior to bud swell.
Oak	Leaf Blister (Taphrina)		2 to 3 lbs	Apply as a thorough coverage spray in the dormant period prior to bud swell.
Alder	Leaf Curl, Catkin Hypertrophy (Taphrina spp.)		2 to 3 lbs	Apply as a thorough coverage spray in the dormant period prior to bud swell.
Poplar	Yellow Leaf Blister (Taphrina populina) Shoot Blight (Venturia populina)		2 to 3 lbs	Apply as a thorough coverage spray in the dormant period prior to bud swell.

(1) Not for use in California.

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ZIRAM GRANUFLO® APPLICATION INFORMATION SPECIFIC TO CROP

SMALL FRUIT AND AND VEGETABLE CROPS	DISEASES	POUNDS ZIRAM GRANUFLO®		DIRECTIONS FOR USE
		per acre	per 100 gal	
Blackberries ⁽¹⁾	Evergreen blackberry canker		3 lbs	Apply in sufficient water for thorough coverage. Make one application between mid-June and early July.
Blueberries ⁽¹⁾	Mummyberry (Monilinia vaccinii-corymbosi)		3 lbs	Apply in sufficient water for thorough coverage. Apply at loose bud scale stage and 7 days later. Do not apply later than 3 weeks after full bloom.
Grape Eastern U.S. (East of the Rockies)	Black Rot (Guignardia bidwellii) Downy Mildew (Plasmopara viticola) Phomopsis Cane and Leaf Spot (Phomopsis viticola) Ripe Rot (Glomerella cingulata) Botrytis Bunch Rot (Botrytis cinerea) (aides in control)		3 to 4 lbs	Begin applications when shoots are at least 1 inch long and continue at 7-14 day intervals or as necessary according to the integrated pest management guidelines for the particular growing area. Use shorter intervals under heavy disease pressure. Do not apply more than 28 lbs per acre per crop cycle. Do not apply later than 21 days to harvest.
Grape Western U.S. (West of the Rockies)	Black Rot (Guignardia bidwellii) Downy Mildew (Plasmopara viticola) Phomopsis Cane and Leaf Spot (Phomopsis viticola) Ripe Rot (Glomerella cingulata) Botrytis Bunch Rot (Botrytis cinerea) (aides in control)		3 to 4 lbs	Apply before buds swell. Repeat after blossoming but before fruit forms.
Tomato ⁽¹⁾ (Do not use on Cherry tomatoes)	Anthracnose (Colletotrichum coccodes) Early Blight (Alternaria solani) Septoria Leaf Spot (Septoria lycopersici)		3 to 4 lbs	Begin applications at first sign of infection and continue at 7-14 day intervals. Use the shorter spray interval under high disease pressure. Do not apply more than 24 lbs per acre per crop cycle. Do not apply within 7 days of harvest. Ziram can be mixed with copper fungicides to enhance bacterial disease control.

(1) Not for use in California.