

1 of 11
Pmd
17713-93

MAY 1 1987

Ms. Carol A. Campbell
Drexel Chemical Company
2487 Pennsylvania Street
P.O. Box 9306
Memphis, TN 38109

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Dear Ms. Campbell:

Subject: Amendment/Added Use Sites and Precautionary
Text Revision
Drexel Ziram 4L
EPA Registration No. 19713-93
Your Submissions Dated July 3 and August 20, 1986
and March 6, 1987

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
 - a. Under Hazards to Humans and Domestic Animals:
 - (1) Add "Corrosive" preceding "Causes irreversible eye damage."
 - (2) Delete ". . . or fatal . . ." preceding "if swallowed."
 - (3) Add "May be fatal if inhaled. Do not breath dust or spray mist."

88945:I:Schraubelt:J-6:KENCO:4/29/87:5/7/87:dej:VO:EK:dej

CONCURRENCES								
SYMBOL	ORIGINATOR							
SURNAME								
DATE								

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b. Change the Pesticide Disposal statement to read as follows:

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.

3. Submit five (5) copies of your final printed labeling 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 section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

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

Sincerely yours,

Lois A. Rossi
Acting Product Manager (21)
Fungicide-Herbicide Branch
Registration Division (TS-767C)

Enclosure

ENCLOSURE COPY

ACCEPTED
COMMENTS
to EPA Letter Dated:

MAY 1 1987

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
19713-93



Ziram 4L

A Flowable Fungicide

ACTIVE INGREDIENT:	
Ziram (Zinc dimethyldithiocarbamate)	41.5%
(Zinc expressive metallic 8.5%)	
INERT INGREDIENTS:	58.5%
TOTAL	100.0%

Contains 4 lbs. Ziram Per Gallon
One gallon of Ziram 4L is equivalent to 5 1/3 lbs. of Ziram 76W

Keep Out Of Reach Of Children

DANGER PELIGRO

PRECAUCION AL USUARIO Si usted no lee ingles, no use este producto hasta que le etiqueta haya sido explicado ampliamente

EPA Reg. No. 19713-93
EPA Est. No. 19713-MS-1

Net Contents 2 1/2 Gallons/9.45 Liters

Manufactured by:



Drexel Chemical Company
PO Box 9306, Memphis, Tenn. 38109-0306

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

DANGER. Causes irreversible eye damage. Harmful or fatal if swallowed. Do not get in eyes or on clothing. Wear goggles or face shield. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 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.

IF SPLASHED IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes and get medical attention.

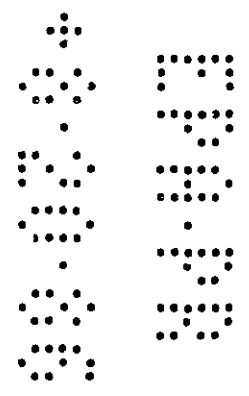
IF SPILLED ON SKIN: Immediately remove contaminated clothing, INCLUDING SHOES, and wash skin with soap and plenty of water. If irritation develops, send for a physician.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and wildlife. Birds and other wildlife in treated areas may be killed. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply when weather conditions favor drift from areas treated. Illegal residues or other undesirable results may occur.

CHEMICAL AND PHYSICAL HAZARDS

Keep away from fire and sparks.



FARMWORKER SAFETY STATEMENT

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons. Do not enter treated areas without protective clothing until sprays have dried. -Because certain states may require more restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information. Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. (Indicate specific oral warnings which inform workers of areas or fields that may not be entered without specific protective clothing, period of time field must be vacated and appropriate actions to take in case of accidental exposure.) When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information. "DANGER--Area treated with Ziram on (date of application). Do not enter without appropriate protective clothing (such as goggles or face shield, long pants, long-sleeved shirt, hat, rubber gloves and boots) until sprays have dried. In case of accidental exposure, treat as follows: If on skin, remove contaminated clothes and wash with soap and water. Flush eyes with water for 15 minutes and get medical attention. If swallowed, call a physician. Drink 1 or 2 glasses of water and induce vomiting.

DIRECTIONS FOR USE

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

IMPORTANT:

These directions for use of this material are general. For specific uses under local conditions, it is suggested that helpful information may be obtained from local, State or Federal Agricultural Agencies who have experience with this type of material.

GENERAL INFORMATION:

ZIRAM 4L is a liquid formulation effective against many fungus diseases. It has excellent adhesive properties and is safe on a wide range of plants. It is compatible with Parathion, Malathion and many commonly used pesticides.

MIXING INSTRUCTIONS:

Fill the spray tank 2/3 full of water; with agitator running, slowly add in the required amount of material. Finish filling with water and continue agitation while spraying. Do not allow spray solution to stand without agitation or over an extended period of time. Where a range of dosages is indicated use the lower rate for mild infestations and the higher rate for heavy infestations. For use on small areas, 3 teaspoonfuls per gallon of water is equivalent to 3 pints per 100 gallons of water.

ZIRAM 4L LABEL

FRUIT & NUT CROP	DISEASE	PTS PER 100 GAL	PTS PER ACRE	DIRECTIONS
ALMONDS	Shot Hole (Fungus)	2 - 4	12 - 18	Apply at popcorn, full bloom, petal fall and 5 weeks later.
	Brown Rot, Blossom and twig blight	2 - 4	12 - 18	Apply at popcorn and full bloom
	Leaf blight, scab	2 - 4	12 - 18	Apply at petal fall and 5 weeks later
APRICOTS	Brown Rot	3	12 - 15	Apply in pre-bloom, blossom and petal fall stages and in early cover sprays
	Shot Hole (Fungus)	3	12 - 15	Apply at pre-bloom, early bloom and full bloom. Under severe disease conditions or when weather is extremely wet, additional applications as often as possible every 5 days until full bloom.
	Shot Hole (Fungus)	3 - 4	12 - 15	For post harvest application in the fall before heavy rains.
NECTARINES, PEACHES	Peach Leaf Curl, Shot Hole (Fungus)	2 - 4	12 - 15	Apply at dormant and popcorn stages. West Coast use on Peaches for leaf curl apply just before fall rains or in early fall and repeat in 3 months while trees are still dormant and again in popcorn stage.
	Brown Rot	2 - 3	12 - 15	Apply at pink bud, 25% to 75% of full bloom, petal fall and cover stages
*****THE FOLLOWING NOT FOR USE IN CALIFORNIA*****				
APPLES	Apple Scab (Pacific NW only)	2	11 - 15	Apply at prebloom, calyx and cover stages. In Washington, apply in first cover spray and in early September on Delicious variety and late September on Wine Sap variety. Use a protectant spray only.
	Bull's Eye Rot (Pacific NW only)	2	11 - 15	Apply in first cover spray and in early harvest spray before fall rains begin. Repeat as necessary, especially if excessive rainfall occurs.
BLACKBERRIES	Evergreen Canker (Pacific NW only)	2 - 4	7-1/2	Apply once between mid-June and early July.

FRUIT & NUT CROP	DISEASE	PTS PER 100 GAL	PTS PER ACRE	DIRECTIONS	LIMITATIONS
BLUEBERRIES	Mummyberry	4		Apply at loose bud scale stage, repeat 7 days later	10
	Botrytis Blossom Blight	4		Apply just before bloom, at full bloom and 2 to 3 weeks later.	
CHERRIES	Brown Rot	2		Apply at popcorn, full bloom, petal fall and as necessary in cover applications.	11
	Leaf Spot	2		Apply at petal fall, shuck fall, and about 2 weeks after shuck fall.	
CRANBERRIES	Fruit Rot	4		Apply three times at 2 week intervals beginning at mid bloom.	12
GRAPES	Black Rot, Powdery Mildew	1/3 pt per 12 gal.		Apply before buds swell. Repeat after blossoming but before fruit forms.	13
PEARS	Pear Scab (Pacific NW only)	2	11 - 15	Apply in prebloom, calyx and cover stages	7, 8
	Bull's Eye Rot (Pacific NW only)	2	11 - 15	Apply preharvest prior to fall rains. Repeat if necessary. Especially if excessive rain/all occurs.	
PECANS	Scab	3		Begin applications when leaves are 1/4 to 1/2 inch long. Repeat after pollination is complete and up to 5 cover sprays at 3 to 4 week intervals through August.	14
STRAWBERRIES	Botrytis Gray mold	2 - 3		Apply at early blossom stage. Repeat 2 to 4 times at 5 to 10 day intervals.	15
	Leaf Spot	2 - 3		Apply when blossom buds first appear. Repeat when first blooms open.	
VEGETABLE CROP				NOT FOR USE IN CALIFORNIA	
BEANS	Rust, Anthracnose	2		Apply when disease first appears and repeat at 4 to 7 day intervals as long as the disease is a threat.	16
CELERY	Early and late blight	2 - 3		Apply before disease is expected to appear or at first sign of infection beginning in the plant bed and continuing in the field at 5 to 10 day intervals.	17

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702

VEGETABLE CROP	DISEASE	PTS PER 100 GAL	PTS PER ACRE	NOT FOR USE IN CALIFORNIA DIRECTIONS	LIMITATIONS
CUCURBITS (CANTELOUPE, CUCUMBERS, MELONS, PUMPKINS, & SQUASH	Alternaria Leaf Blight, Anthracnose, Angular Leaf Spot, Bacterial Wilt, Downy Mildew, Scab	2 - 3		Apply before disease is expected to appear or at first sign of infection beginning when plants are small. Repeat at 7 to 10 day intervals as necessary.	18
TOMATOES	Anthracnose, Early Blight, Septoria Leaf Spot	2		Begin applications when plants are 2 to 6 inches high or later at first sign of in- fection. Repeat at 7 to 10 day intervals as necessary.	18
	Botrytis Gray Mold (Green House)	2		Begin applications before disease is expected to appear or at first sign of in- fection. Repeat at 3 to 10 day intervals as necessary	
ORNAMENTAL CROP					
ASTERS	Rust	2 pts per 12 gals.		Begin application in early season and con- tinue at 7 day intervals until blossoms form.	
CARNATIONS, MARIGOLDS, MORNING GLORY, & SNAPDRAGONS	Rust	2-1/2		Apply at 7 to 10 day intervals as needed throughout growing season.	
CARNATIONS, CHRYSANTHE- MUMS, DAHLIAS, GIBBIFLUS, SNAPDRAGONS	Leaf Spot	2-1/2		Apply at 7 to 10 day intervals as needed throughout growing season.	
AZALEAS, CAMELLIAS	Petal Blight	3 - 4		Begin application at first bloom, Repeat at 7 to 10 day intervals through bloom. Apply as a drench to mulch and litter - beneath and around bushes.	

80511

ORNAMENTAL CROP	DISEASE	PTS PER 100 GAL	PTS PER ACRE	DIRECTIONS	LIMITATIONS
DAHLIAS, DELPHINIUM, GOLDEN GLOW, HOLLYHOCKS, PHLOX	Powdery Mildew	2-1/2		Apply at 7 day intervals throughout growing season	
ROSES	Black Spot, Powdery Mildew	2-1/2		Begin application when leaves unfold. Repeat at 7 to 10 day intervals throughout season.	
PINE SEEDLINGS IN NURSERY BEDS	Fusiform Rust	4		Begin application at time of emergence Repeat at 3 to 5 day intervals to mid-June.	

cases. Do not move containers from one area to another unless they are securely sealed. Keep container tightly sealed when not in use. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Store in original containers only. If the contents are leaking or material is spilled follow these steps while wearing protective clothing:

1. Contain spill, absorb with material such as saw dust, clay granules or dirt.
2. Collect and place in suitable containers for disposal.
3. Wash area with water and soap to remove remaining pesticide.
4. Follow washing with clean water rinse.
5. Do not allow run off to enter sewer or contaminate water supplies.
6. Dispose of waste as indicated below:

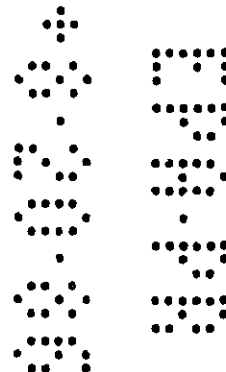
Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

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

WARRANTY - CONDITION OF SALE:

OUR RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of the Seller. Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

In no case shall Drexel or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by Drexel Chemical Company and is accepted as such by the Buyer.



ZIRAM 4L LABEL

LIMITATIONS

- 1. 12 pints per acre - Do not apply later than 5 weeks after petal fall or
- 2. 25 pints per acre - Do not apply later than petal fall
- 3. 20 pints per acre - Do not apply after early cover period
- 4. 22 pints per acre - Post harvest application
- 5. 22 pints per acre - Last application at petal fall or
- 6. 15 pints per acre - Remove excess residues by wiping or brushing
- 7. 18 pints per acre - No time limitation. Do not use under adverse drying conditions. Long extended dry periods may cause marking on Golden Delicious apple varieties where product collects in one spot.
- 8. 24 pints per acre - Do not apply within 7 days of harvest. Use only with high volume sprayers. Concentrate sprayers have a greater chance of marking fruit on the outside tree edges.
- 9. 7 pints per acre - Do not apply later than early July
- 10. 11 pints per acre - Do not apply later than 3 weeks after full bloom
- 11. 8 pints per acre - Do not apply within 7 days of harvest
- 12. 23 pints per acre - Do not apply later than 4 weeks after mid-bloom
- 13. 6 pints per acre - Do not apply after fruit begins to form
- 14. 30 pints per acre - Do not apply later than August
- 15. 9 pints per acre - Remove residues by washing if application is made within 7 days of harvest
- 16. 7 pints per acre - Do not apply to snap beans within 4 days of picking
- 17. 6 pints per acre - Remove excess residues by stripping, trimming and washing
- 18. 7 pints per acre

