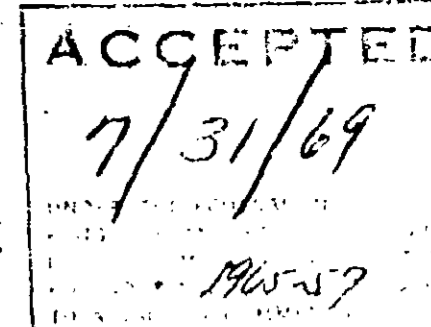




# TECHNICAL DATA SHEET

June 11, 1969  
Form VHZ-96-1a

-2-

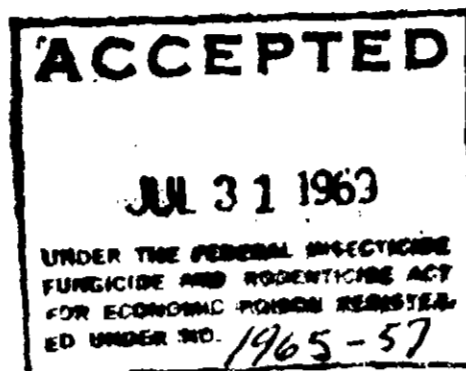
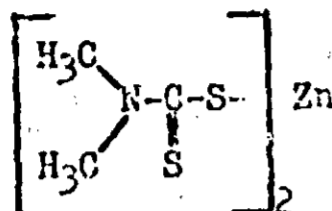


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VANGIDE MZ-96  
Ziram Wettable Powder  
Agricultural Fungicide

CHEMICAL COMPOSITION:

Zinc dimethyldithiocarbamate

STRUCTURAL FORMULA:



MOLECULAR FORMULA:

C<sub>6</sub>H<sub>12</sub>N<sub>2</sub>S<sub>4</sub>Zn

MOLECULAR WEIGHT:

305.62

ASSAY:

96% Ziram (zinc dimethyldithiocarbamate) Minimum

TOTAL ZINC AS METALLIC:

20.6% Minimum

PHYSICAL FORM:

Powder

MOISTURE CONTENT:

1% Maximum

MELTING RANGE:

252-260°C.

COLOR:

White to cream

SPECIFIC GRAVITY:

1.71 ± 0.03

STABILITY:

May be stored indefinitely at room temperature in closed containers.

SOLUBILITY:

Practically insoluble in water; moderately soluble in dilute caustic, benzene, carbon disulfide, and chloroform.

TOXICITY TO MAMMALS:

Acute Oral LD <sub>50</sub> - Guinea pig	- 100-150 mg/kg.
	Rabbits - 400 mg/kg.
	Rats - 1400 ± 99 mg/kg.

PRECAUTIONS:

Keep Out of Reach of Children.  
May cause irritation of eyes, nose, throat and skin. May be harmful if inhaled or swallowed. Avoid breathing dust or spray mist. Avoid contact with eyes, skin or clothing. In case of contact, flush with plenty of water. For eyes, get medical attention. Keep away from fire and sparks. Do not reuse empty containers. Destroy it by perforating or crushing. Bury or discard in a safe place.

R-A-V-120

Directions For Use As A Spray  
All Recommendations Based on 100 Gallons of Spray

ALMONDS:

Shot-Hole (California) - 1-1/4 to 1-5/8 pounds at popcorn, full-bloom, petal-fall and 5 weeks later.

Brown Rot (Blossom and Twig Blight) - 1-1/4 to 1-5/8 pounds at popcorn and full-bloom.

Leaf Blight - 1-1/4 to 1-5/8 pounds at petal-fall and 5 weeks later.

Scab - 1-1/4 to 1-5/8 pounds after petal-fall. If application is after popcorn stage, do not feed hulls to dairy animals or animals being finished for slaughter.

APPLES AND PEARS:

Scab (California, Pacific Northwest and British Columbia) - 1-1/4 pounds in pre-bloom, calyx and early cover sprays.

Bull's Eye Rot - 1-1/4 pounds in first codling moth cover spray and just before fall rainy season. During excessive rainfall, additional sprays may be required.

APRICOTS:

Shot-Hole (California and Oregon) - 1-1/4 to 1-5/8 pounds at red bud, early bloom, and full-bloom. Under severe disease conditions or extremely humid weather, apply as frequently as every 5 days until full-bloom.

BEANS:

Rust (Anthracnose) - 1-1/4 to 1-5/8 pounds at first appearance of disease, repeated at 4- to 7-day intervals as long as possibility of disease exists. No application to snap beans later than 4 days before harvest.

BLACKBERRIES:

Evergreen Blackberry Canker (Pacific Northwest) - 1-1/4 to 1-5/8 pounds between mid-June and early July

BLUERERRIES:

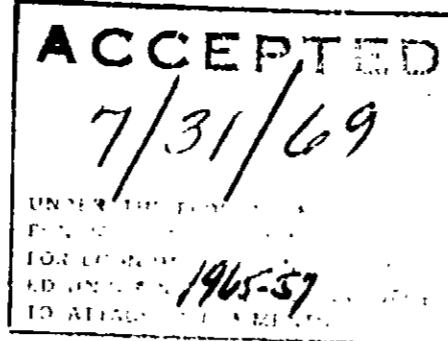
Mummy Berry - 2-1/2 pounds at loose bud scale and 7 days later. No applications later than 3 weeks after full-bloom.

CELERY:

Early Blight (Cercospora), Late Blight (Sclerotinia) and Damping-Off - 1-1/4 to 1-5/8 pounds or 3/4 pound of VANGIDE MZ-96 plus 3/4 pound 95% Perform Wettable Powder at weekly intervals beginning in the plant bed or at 3- to 5-day intervals during severe conditions. Remove residues by trimming and washing.

**F. T. VANDERBILT COMPANY, Inc., 230 PARK AVENUE, NEW YORK, N. Y. 10017**

The recommendations for use of our materials are based upon tests believed to be reliable. However we do not guarantee the results to be obtained.



CRANBERRIES:

Fruit Rots - 2-1/2 pounds at 2-week intervals starting at mid-bloom, making total of three applications. No applications later than 4 weeks after mid-bloom.

CUCUMBERS, MELONS, PUMPKINS, SQUASH:

Downy Mildew and Leaf Diseases Other Than Powdery Mildew - 1-1/4 to 1-5/8 pounds at 7- to 10-day intervals under conditions favorable to disease, or at 3- to 5-day intervals when disease conditions are great.

ORNAMENTALS:

Azaleas and Camellias (Petals Blight) - 1-1/4 to 1-5/8 pounds at 3- to 5-day intervals as required.

Chrysanthemums and Snapdragons (Leaf Spot) - 1-1/4 to 1-5/8 pounds every 7 to 10 days or as required.

PEACHES AND NECTARINES:

Peach Leaf Curl and Shot-Hole - 1-1/4 to 2-5/8 pounds at dormant and popcorn stages.

Brown Rot Blossom Blight - 1-1/4 to 1-5/8 pounds at pink bud and 1/4 to 3/4 of full-bloom.

Fruit Brown Rot - 1-1/4 to 1-5/8 pounds at petal-fall, 2 weeks later, and additional applications at 1- to 2-week intervals beginning near the beginning of last month before picking. Remove residues by wiping or brushing if applied during last two weeks before picking.

PECANS:

Scab - 1-5/8 pounds four times at 21- to 28-day intervals when tips of small nuts become brown. A fifth application in August may be required when danger of disease is great.

PINE SEEDLINGS:

Fusiform Rust in Plant Beds - 1-5/8 pounds at 3- to 5-day intervals from emergence to mid-June.

STRAWBERRIES:

Leaf Spot - 1-1/4 to 1-5/8 pounds when blossoms first open and repeat when first blossoms open.

Grey Mold (Botrytis) - 1-1/4 to 1-5/8 pounds at 10-day intervals, starting at early blossom stage and making 3 to 5 sprayings. Remove residues by washing if sprayed as late as 7 days before picking.

TOMATOES:

Anthracnose and Early Blight - 1-1/4 to 1-5/8 pounds at time tomatoes are first well formed, repeating at 7- to 10-day intervals, and under severe conditions more frequently, beginning when plants are set. If Anthracnose danger is severe, double the above amount per acre for canning tomatoes.

Late Blight - Alternate 1-1/4 to 1-5/8 pounds with maneb at weekly intervals.

GREENHOUSE TOMATOES:

Grey Mold - 1-1/4 to 1-5/8 pounds weekly or twice weekly under severe conditions.

