

P.M. 21

7969-61

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JUN 27 1990

Karen R. Blundell
BASF Corporation
100 Cherry Hill Road
Parsippany, NJ 07054

Dear Ms. Blundell

Subject: Label Revisions - Add Pecans
Kamulus DF Fungicide/acaricide
EPA Registration No. 7969-61
Your Submission Dated November 2, 1989

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. The changes requested in our previous letter of May 30, 1989 were not included. These were: for sugar and table beets, add "repeat as necessary". Under Environmental Hazards, change the second sentence to read "Do not contaminate water when disposing of equipment washwaters."
 - b. For avocados, indicate when to apply. Your previous label stated "as needed." A statement such as "apply when mites are first noticed" would be clearer.
3. Submit one (1) copy of your final printed labeling before you release the product for shipment.

54313:I:Stone:R-15:KENCO:06/19/90:07/19/90:CL:sw:vo:ek:dg

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

EPA Form 1320-1 (12-70) OFFICIAL FILE COPY

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,

Susan Lewis
Product Manager (21)
Fungicide-Herbicide Branch
Registration Division (H7505C)

389
Revised
October 23, 1989

Page 1 of 7

BASF

KUMULUS[®] DF
Fungicide/Acaricide

Water dispersible sulfur granule
Active Ingredient:
Inert Ingredients:

Sulfur 80%
20%
100%

Keep Out of Reach of Children.
Caution

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: Get medical attention if irritation develops.

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.

See side panel for additional Precautionary Statements.

Net: 50 lbs

BASF Corporation
100 Cherry Hill Road
Parsippany, NJ 07054
USA

ACCEPTED
with COMMENTS
in EPA Letter Dated:

JUN 27 1990

EPA Est. No. 7969-WG 01
EPA Reg. No. 7969-61

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

Made in West Germany

Precautionary Statements:

Hazards to humans and to domestic animals.

Caution: Harmful if swallowed, avoid breathing spray mist.

Avoid contact with eyes, skin and clothing.

Wash thoroughly with soap and water after handling.

Environmental Hazards:

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 treated areas.

Reentry Statement:

Do not enter treated areas for 24 hours unless appropriate protective clothing is worn.

Because certain states may require more restrictive reentry 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. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers.

When oral warnings are given, warnings shall be given in a language customarily understood by workers and must indicate the specific period of time that treated areas may not be entered without protective clothing. Oral warnings must also include appropriate first aid instructions in case of accidental exposure. These instructions are given in the Statement of Practical Treatment at the beginning of this label. Written warnings must include the following information, "CAUTION. Area treated with Kumulus® DF on (date of application). Do not enter without appropriate protective clothing for 24 hours (or other reentry interval if your State has a more restrictive interval for this product). If accidental exposure occurs, follow the instructions below."

(Written warnings must include the Statement of Practical Treatment given at the beginning of this label.)

Directions for Use:

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

General:

Do not apply to or allow spray drift on sulfur sensitive plants such as D'anjou pears, apricots, chrysanthemums, cranberries, spinach or other sensitive crops listed on this labeling. Sulfur may burn foliage when temperature is excessively high. Do not apply if temperatures during or within three days after application are expected to exceed 90°F in the area to be treated. Do not apply with or following an oil application for 21 days. Do not apply oil for 21 days following treatment. When growing crops for processing, consult the processor before applying sulfur. Do not apply Kumulus DF through any type of irrigation system.

BEST AVAILABLE COPY

DILUTE GROUND APPLICATION:

A-Orchard Application-Apply specified rate in 100 to 800 gallons of water per acre.

B- All Other Applications-Apply specified rate in 20 to 60 gallons of water per acre.

CONCENTRATE GROUND APPLICATION:

A-Orchard Application-Apply specified rate in 20 to 100 gallons of water per acre.

B-All Other Applications-Apply specified rate in not less 5 gallons of water per acre.

AERIAL APPLICATION:

A-Orchard Rates-Should not be applied in less than 10 gallons of water per acre.

B-All Other Applications-Apply specified rate in 5 to 20 gallons of water per acre.

RECOMMENDATIONS: Pour needed amount of Kumulus DF into spray tank under agitation. If necessary, add a few drops of oil to avoid foaming.

CROP	PROBLEM	LBS. PER ACRE
Almonds, cherries, Plums, Prunes, Pecans	Brown rot, Powdery mildew, Leaf spot, Silver mite, Flat mite, Red spider mite.	10-20

Apply at bloom or early petal fall. Repeat as necessary, usually 10-14 days or after a period of wet weather.

Apples, pears	Powdery mildew, Scab, Blister mite, Red spider mite	10-20
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Do not apply to D'anjou pears or to sensitive apple varieties such as Ontario or Cox orange. Apply pre-bloom and petal fall. Apply with cover sprays throughout the season at 10-14 day intervals.

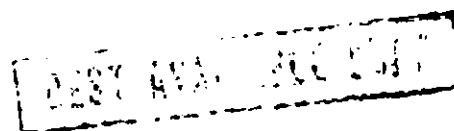
Asparagus*	Rust	10-30
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Use after cutting stops. Irrigate and cultivate before applying Kumulus DF. Repeat at 7 to 10 day intervals through the fern growth season.

*Not registered in California

Avocados	Brown mite	10-30
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Beans, Peas, Broccoli, Brussels	Powdery mildew, Septoria leaf spot,	3-5
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649

Sprouts, Cabbage, Red spider mite
 Cauliflower, Collards,
 Kale, Peppers, Potatoes,
 Mustard Greens,
 Rutabagas, Turnips

Start at early leaf stage. Repeat application every 10-14 days with or without other pesticides immediately after a rain.

Blackberries, Boysenberries, Dewberries, Loganberries, Raspberries (Rubus spp.)	Powdery mildew	6-12
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Begin when new shoots are 6 inches long and before blossoms open. Repeat at 10 day intervals or as necessary.

Blueberries, Gooseberries, Currants Huckleberries	Powdery mildew	6-15
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Begin when disease first appears. Repeat at 7 to 10 day intervals or as necessary.

Carrots, Onions, Garlic	Petrobia mite and Powdery mildew.	3-10
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Begin when the disease first appears and repeat as needed.

Citrus	Flat mite, Silver mite, Red spider mite	8-20
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Apply in any spray NOT CONTAINING OIL.
 Do not apply within 21 days of an oil application.

Corn, Small Grains Sorghum, Soybeans	Suppression of Red spider mite Two-spotted mite, Grass banks mite and Pacific mite; for control of the Atlantic mite (small grain only) and for control of Powdery mildew.	6-15
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Apply when disease first appears and repeat as necessary or with the regularly scheduled insecticide program.

Cotton, Seed	Red spider mite	3-5
Alfalfa,		
Grapes	Powdery mildew, Bud mite, 2-5 Blister mite, Red spider mite	

Apply in late dormancy or with cutworm spray, early shoot period and through season on 14 day schedule or with other pesticides.

Mangoes	Powdery mildew	10-30
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Begin before bloom. Repeat in bloom, after fruit set and 3 weeks later or as necessary.

Melons	Powdery mildew	20-25
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Treat when the disease first appears and repeat as necessary. Sulfur can injure plants, especially when the temperature reaches 95°F. Do not use on sulfur sensitive varieties.

Peaches, Nectarines	Brown rot, Powdery mildew, Silver mite, Red spider mite	10-20
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Apply at bloom or early petal fall. Repeat as necessary, usually 10-14 days or after a period of wet weather.

Peanuts	Powdery mildew, Red spider mite, Leaf spot	3-5
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Start in early leaf stage. Repeat applications as necessary, usually 10-24 days.

Strawberries	Powdery mildew, Red spider mite	5-10
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Start in early leaf stage, repeat applications at 10-14 day intervals with or without other pesticides. For Powdery mildew, begin at first signs of disease and repeat as necessary.

Sugar Beets	Red spider mite, Powdery mildew	10-20
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Apply at first indication of problem with or without other pesticides.

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Table Beets	Red spider mite, Powdery mildew	3-5
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Apply at first indication of problem with or without other pesticides.

Tomatoes	Russet mite	10-20
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Thorough coverage is required.

Walnuts	European red mite, Pacific mite, Almond mite, Twospotted mite, Red spider mite	10-20
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Apply with mite sprays during season to increase the effectiveness of miticides.

Note to User: Certain varieties of walnuts are sensitive to sulfur sprays under certain conditions. Do not apply unless the varieties are known to be tolerant of sulfur.

Ornamentals:

Asters, Carnations	Powdery mildew	3-5
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Calendula, Cherry Laurels, Hollyhock, Similax	Leaf spots and Powdery mildew
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Clematis, Columbine, Ivy (English), Laurel, Petunia, Sage	Leaf Spots
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Cosmos, Crepe Myrtle, Dahlia, Delphinium, Gladiolus, Lingustrum, Sunflowers, Sweet Peas, Violets, Zinnias	Powdery Mildew
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Roses	Powdery mildew and Black spot	3-5
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Apply 3-5 lbs. in 100 gallons of water. Ensure complete plant coverage. Begin when disease first appears and repeat at 5 to 10 day intervals.

Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on

site or at an approved waste disposal facility. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

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 use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION or the Seller. All such risks shall be assumed by the Buyer.

BASF 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.

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