

Reg # 4581-373

PM-21

178

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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MAR 20 1991

Ms. Rebecca A. Clemmer
Attochem North America, Inc.
Agchem Division, Room 619
3 Parkway
Philadelphia, PA 19102

Dear Ms. Clemmer:

Subject: Amended Labeling
Microthiol Special
EPA Registration No. 4581-373
Your Submission Dated July 17, 1990

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable subject to the comments listed below. Five copies of the finished labeling must be submitted prior to releasing the product for shipment.

- Under the entries for broccoli and greens, delete the claim for control of rust. We have no information to suggest that this disease occurs or is a pest on these crops.
- Under cereals, in the directions column, change "diseases" to "mites" since no diseases are listed.

Sincerely yours,

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

H7505C/BCHAMBLISS/cd/3-8-91/Room 227B/557-7382

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

PROPOSED LABEL

278
ACCEPTED
with COMMENTS
in EPA Letter Dated:

MAR 20 1991

**MICROTHIOL® SPECIAL
MICRONIZED WETTABLE SULFUR**

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

ACTIVE INGREDIENT:		
Sulfur.....	80.0%	4581-373
INERT INGREDIENTS.....	20.0%	
TOTAL	100.0%	

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

IF ON SKIN, wash with soap and water.

IF IN EYES, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

IF SWALLOWED, give one or two glasses of water and induce vomiting by sticking finger down throat. Never give anything by mouth to an unconscious person.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)

CAUTION

May cause irritation of eyes. Harmful if swallowed, inhaled, or absorbed through skin. Avoid breathing dust or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or wetlands (swamps, bogs, marshes and potholes). Do not contaminate water by disposal of equipment washwater. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas.



EPA Reg. No. 4581-373

EPA Est. No. 44423-FR-1

NET CONTENTS 30 LBS/13.6 KG

Sold by

Atochem North America—Agchem Division

Philadelphia, PA 19102

Made and Printed in France

PROPOSED LABEL**MICROTHIOL SPECIAL**

Micronized Wettable Sulfur
(EPA Reg. No. 4581-373)

REENTRY STATEMENT

Do not enter treated areas without protective clothing within 24 hours after application. Protective clothing means, at least, a hat or other suitable head covering, a long-sleeved shirt and long legged trousers, shoes and socks. 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. When oral warnings are given, such warnings shall be given in a language customarily understood by the workers. Oral warnings must be given when there is reason to believe that written warnings cannot be understood by the workers. Written warnings must include the following information: "CAUTION. Area treated with MICROTHIOL SPECIAL on (date of application). Do not enter without protection: clothing within 24 hours after application. Protective clothing means, at least, a hat or other head covering, a long-sleeved shirt and long legged trousers, shoes and socks."

APPLICATION INSTRUCTIONS

Apply through any type of handheld, knapsack, mechanical or pneumatic spraying equipment.

MIXING: Pour the required amount of MICROTHIOL SPECIAL into the indicated amount of water while stirring. MICROTHIOL SPECIAL disperses instantly.

Dilute Application:

Ground: Specified rate in 20 to 60 gallons of water per acre.

Orchard: Specified rate in 100 to 800 gallons of water per acre.

Concentrated Application:

Ground: Specified rate in 5 to 10 gallons of water per acre.

Orchard: Specified rate in 20 to 100 gallons of water per acre.

Aerial Application:

Ground: Specified rate in 3 to 20 gallons of water per acre.

Orchard: Specified rate in 10 to 20 gallons of water per acre.

COMPATIBILITY

Microthiol Special is completely compatible with Bordeaux mixture, copper fungicides, liquid fertilizers and all organic fungicides, insecticides, acaricides and herbicides.

USE INSTRUCTIONS

Some crops may be damaged by sulfur under certain climatic conditions. Do not use on any crop unless sulfur has been shown to be safe in your locality. Do not allow spray to drift onto sulfur-sensitive crops such as apricots, cranberries, spinach and Anjou pears. Sulfur may burn foliage when temperature is high. Do not apply at such times. Do not use within two weeks of an oil spray treatment. For citrus, do not apply within 21 days of an oil spray. When growing crops for processing, consult the processor before applying sulfur.

NOTE: The application rates specified for each crop are the maximum that should be applied. These amounts may be reduced if experience or local practice indicate that lesser amounts may be effective. Consult State Agriculture Experiment Station or State Extension Service specialist for rates recommended in your local area.

STORAGE AND DISPOSAL

STORAGE INSTRUCTIONS: Store in a closed package in a cool, dry place. Do not store near flammable materials. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. If spilled during storage or handling sweep up spillage and dispose of in accordance with the Pesticide Disposal Instructions below.

PESTICIDE DISPOSAL INSTRUCTIONS: Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL INSTRUCTIONS: Completely empty bag by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of bag in a sanitary landfill, by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

WARRANTY AND DISCLAIMER

Atchem North America warrants that this material 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 risks inherent in such use. ATCHEM MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY, OR NO ONE SHALL ASSUME OR SELLER OR DEALER FOR COMPENSATION, SPECIAL OR SPECIAL DAMAGES RESULTING FROM THE USE OR NONUSE OF THIS PRODUCT INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, BUSINESS REPUTATION, OR CONVENIENCE; LATER COST; OR OTHER DAMAGES INCURRED IN PLANTING OR HARVESTING.

Atchem and seller offer this product and the buyer and user accept it subject to the foregoing conditions of sale and warranty which may be varied only by agreement in writing signed by a duly authorized representative of Atchem.

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PROPOSED LABEL

MICROTHIOL® SPECIAL

Micronized Wettable Sulfur
(EPA Reg. No. 4581-373)

DIRECTIONS FOR USE

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

VEGETABLE CROPS

CROP	PEST	RATE LBS/A	DIRECTIONS
Beans	Leaf Spot Powdery Mildew	7	Apply at early leaf stage and repeat at 14-day intervals as necessary.
Broccoli, Brussels sprouts, Cabbage, Cauliflower	Powdery Mildew Red Spider Mite Rust	3-10	Begin in early leaf stage. Repeat application every 10 to 14 days as necessary.
Carrots	Powdery Mildew Petrobis Mite	3-10	Apply at early leaf stage and repeat application every 14 days as needed.
Cucumbers	Powdery Mildew	2-4	Apply when disease first appears and repeat as necessary. Do not apply more than 2 pounds MICROTHIOL per acre per application during periods of high temperatures.

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Greens: Collards, Kale, Mustard	Powdery Mildew Red Spider Mite Rust	3-10	Apply at early leaf stage and repeat application every 14 days as needed.
Lettuce (Head and Leaf	Powdery Mildew Rust Red Spider Mite	5-6	Apply at early leaf stage and repeat every 14 days as needed. Thorough coverage is required.
Melons	Powdery Mildew	10-15	Apply when disease first appears and repeat as needed. Sulfur can injure plants, especially when temperature reaches 95 F. Do not use on sulfur sensitive varieties.
Onions, Garlic	Powdery Mildew Petrobia Mite	3-10	Apply when disease first appears and repeat as needed.
Potatoes	Powdery Mildew Red Spider Mite	5	Apply at early leaf stage and repeat every 14 days as needed.
Peppers	Powdery Mildew Red Spider Mite	3-10	Apply at early leaf stage and repeat every 14 days as needed.
Rutabagas	Powdery Mildew Red Spider Mite	3-10	Apply at early leaf stage and repeat every 14 days as needed.
Squash	Powdery Mildew	10-15	See use directions for melons, above.
Tomatoes	Russet Mite Powdery Mildew	5-10	Begin application when symptoms first appear. Thorough coverage is required.
Turnips	Powdery Mildew Red Spider Mite	3-10	Apply at early leaf stage and repeat every 14 days as needed.

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FRUIT AND NUT CROPS

CROP	PEST	RATE LBS/A	DIRECTIONS
Almonds	Brown Rot Leaf Spot Silver Mite Flat Mite Red Spider Mite	10-20	Apply at bloom or early petal fall. Repeat as necessary, usually 10 to 14 days or after a period of wet weather.
Apples, Pears	Powdery Mildew ✓ Scab Blister Mite ✓ Red Spider Mite	10-20	Apply at prebloom and petal fall. Apply with cover sprays throughout the season. Do not apply to Anjou pears.
Avocados	Brown Mite	10-20	Apply as needed.
Citrus	Flat Mite ✓ Silver Mite ✓ Rust Mite ✓ Broad Mite Bud Mite Red Spider Mite ✓ Six-spotted Mite Thrips Yuma Spider Mite	10-20	Do not apply in any spray containing oil when temperatures reach 85-90°F or above.
Grapes	Powdery Mildew Bud Mite Blister Mite Red Spider Mite	5-10	Apply throughout the season at 14-day intervals as needed. Note: Use with caution on concord or labrusca type grapes as injury can occur after bloom.
Langos	Powdery Mildew	10-30	Begin application before bloom. Repeat at bloom, after fruit set, and 3 weeks later or as necessary.
Stone Fruits: Peaches, Plums, Cherries, Nectarines, Prunes	Powdery Mildew ✓ Brown Rot Leaf Spot Silver Mite Flat Mite Red Spider Mite ✓	10-20	Follow directions for almonds, above. For Brown Rot of fruit, apply when fruit starts to ripen. Do not apply to apricots.
Walnuts Pecans, Mecadamias	Pacific Mite ✓ Almond Mite Two spotted Mite ✓ Red Spider Mite ✓ Broad Mite	10-30	Apply throughout the season as needed. Note: some varieties of walnuts and pecans are sensitive to sulfur sprays under certain conditions. Do not apply unless varieties are known to be tolerant of sulfur.

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FIELD CROPS

CROP	PEST	RATE LBS/A	DIRECTIONS
Alfalfa	Atlantic Mite Red Spider Mite	8-10	Apply throughout the season as necessary.
Cereals: Corn, ✓ Wheat, ✓ Barley, ✓ Oats, ✓ Rye, ✓ Sorghum ✓	Red Spider Mite ✓ Two Spotted Mite ✓ Pacific Mite ✓ Atlantic Mite ✓	8-10	Apply when disease first appears and repeat applications as necessary.
Cotton ✓	Atlantic Mite Red Spider Mite ✓	5-10	Apply throughout the season as necessary.
Peanuts ✓	Powdery Mildew ✓ Leaf Spot Red Spider Mite ✓ Rust	5-8	Apply at early leaf stage and repeat applications as necessary.
Soybeans ✓	Leaf Spot ✓ Powdery Mildew ✓	10-15	Apply at early leaf stage and repeat at 14-day intervals as necessary.
Sugar Beets ✓	Powdery Mildew ✓ Red Spider Mite	5-10	Apply as soon as symptoms appear and repeat every 2 to 3 weeks as necessary.

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SMALL FRUITS AND BERRIES

CROP	PEST	RATE LBS/A	DIRECTIONS
Blackberries, Boysenberries, Dewberries, Loganberries, Blueberries, Gooseberries, Huckleberries, Currants	Powdery Mildew ✓	6-15	Begin application before blossoms open and continue at 10-day intervals as necessary.
Raspberries	Powdery Mildew	6-15	Apply each week from first bloom to fruit set. Repeat as the weather requires.
✓ Strawberries	Powdery Mildew Red Spider Mite	5-10	Begin application at early leaf stage and repeat as necessary. Do not use on sulfur-sensitive varieties.

MISCELLANEOUS CROPS

CROP	PEST	RATE LBS/A	DIRECTIONS
Spearmint, Peppermint	Powdery Mildew	4-6	Apply when mint is 5-6" tall or when disease appears. Repeat twice, at 30-day intervals. Do not apply within 30 days of harvest.
Ornamentals, Roses	Powdery Mildew Leaf Spot	3-10 by ground or 3-20 by air	Apply to ensure complete plant coverage. Begin when disease first appears and repeat at 5-10 day intervals.

All applicable instruction, restrictions and precautions on the EPA registered label must be followed.

Do not apply this product through any type of chemigation system.

This label must be in the possession of the user at the time of pesticide application.

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