

PH 21 4581-322 F, 1/2 10/9
United States Environmental Protection Agency
Washington, D.C. 20460

OCT 13 1993

Office of
Prevention, Pesticides and
Toxic Substances

Rebecca A. Clemmer
ELF ATOCHEM N.A. INC
AGCHEM DIVISION
THREE PARKWAY, ROOM 619
PHILADELPHIA PA 19102

Subject: Label Amendment Submission of 06/11/93
in Compliance with WPS Labeling Requirements
EPA Reg No. 4581-322
TOPSIN - M 70% WP

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is accepted subject to the comments listed below.

Based on your certification, the Agency has accepted only those changes to your labeling which are necessary to comply with PR Notices 93-7 and 93-11, which reflect the WPS labeling requirements of 40 CFR part 156, subpart K. Any other labeling changes submitted in connection with this amendment application and not directly related to compliance with PR Notice 93-7 or 93-11 have neither been reviewed nor accepted by the Agency. If you wish to make any such changes, you must submit a separate amendment application proposing them. If your product registration is currently suspended, acceptance of this labeling amendment does not affect the suspension in any way.

A copy of your proposed labeling stamped "Accepted with comments" is attached. Make any required changes described in the attached and send three copies of final labeling as soon as it is available to:

2087

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (H-7504C)
U.S. Environmental Protection Agency
401 M Street SW
Washington, DC 20460-0001

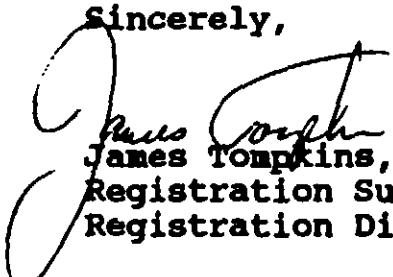
Hand or courier deliveries of final labels may be made to:

Document Processing Desk (FIN-LABEL)
Room 266A Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Please correct the typographical errors circled on the draft before printing final labeling.

In your final labeling the "Agricultural Use Requirements" text" must be contained in a clearly separate box. This box may be set apart by a line, by another graphical device, by a different color background, or in any other way that clearly distinguishes it from surrounding text.

Sincerely,



James Tompkins, Deputy Chief
Registration Support Branch
Registration Division (H7505W)

elf atochem

ATO

ACCEPTED
with COMMENTS
in EPA Letter Dated

OCT 13 1993

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

4581-322

TOPSIN[®] M 70W

THIOPHANATE-METHYL FUNGICIDE

70% Wettable Powder

ACTIVE INGREDIENT:

Thiophanate-methyl (dimethyl(1,2-phenylene)-
bis(iminocarbonothioyl))bis(carbamate))*

70%

INERT INGREDIENTS:

30%

TOTAL: 100%

*Also known as dimethyl 4,4'-o-phenylenebis(3-thiophanate)

*TOPSIN is a registered trademark of Nippon Soda Company, Ltd., and is licensed to Elf Atochem North America, and is covered by one or more of the following U.S. Patents: 3,769,306; 3,856,847; 4,020,095; and 4,029,813.

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Call a physician. Never give anything by mouth to an unconscious person.

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

IF ON SKIN, immediately flush skin with plenty of water. Get medical attention if irritation persists.

See back panel for Precautionary Statements.

EPA Reg. No. 4581-322

EPA Est. No. 39578-TX-1

Net Weight: _____ Pounds (_____ Kgs)

Sold by:

ELF ATOCHEM NORTH AMERICA, INC.—AGCHEM DIVISION
Philadelphia, PA

BEST AVAILABLE COPY

GENERAL INFORMATION AND DIRECTIONS FOR USE

Page 2
TOPSIN M 70:

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 personal protective equipment (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 12 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.

Apply TOPSIN M with ground or aerial equipment, using sufficient volume of spray to provide thorough coverage. Add required amount of TOPSIN M to partially filled tank agitated by mechanical or hydraulic means, and then add remaining required amount of water. Continuous agitation is required to keep the material in suspension. Do not tank mix with highly alkaline pesticides, such as Bordeaux mixture or lime sulfur. No claim of compatibility with other pesticides is implied. Use the higher rate under conditions of severe disease pressure. Also, see local State Extension Service recommendations for application schedules.

Page 3
TOPSIN M 70W

Use the LBS/ACRE rate for concentrate sprayers (less than 400 gallons) and aerial application. Use the LBS/100 GAL rate for dilute ground application.

Chemigation instructions follow Directions for Use. Do not apply through any irrigation system unless these instructions are followed.

IMPORTANT: If, after using TOPSIN M as recommended, treatment is not effective, a tolerant strain of fungi may be present. Consult your State Agricultural Experiment Station or your State Agricultural Extension Service for advice on the prompt use of some other suitable fungicide.

CROP	DISEASES	LBS/ACRE	LBS/100 GAL	REMARKS
Almonds	Brown Rot (<i>Monilia</i> sp.) (<i>Blaschke</i> sp.)	1 1/2-2		Apply at early post-bloom and early post-harvest.
Apples (pre-harvest)	Apple Scab (<i>Venturia</i> sp.) Bitter Rot (<i>Glomerella</i> sp.) Fruit Rot (<i>Botrytis</i> sp.) Fruit Rot (<i>Botrytis</i> sp.) Fruit Rot (<i>Botrytis</i> sp.) Fruit Rot (<i>Botrytis</i> sp.) Fruit Rot (<i>Botrytis</i> sp.) Fruit Rot (<i>Botrytis</i> sp.) Fruit Rot (<i>Botrytis</i> sp.)	1 1/2	1 1/2-2	Apply at 5- to 10-day intervals from green tip through post-harvest, depending on 7- to 14-day intervals in other crops. NOTE: For control of apple diseases in the Southeastern States of Florida, Georgia, South Carolina, North Carolina and Alabama, use 3 to 4 pounds TOPSIN M per acre.
Bears	Gray Mold (<i>Botrytis</i> sp.) White Mold (<i>Sclerotinia</i> sp.)	1 1/2-2 OR 1-1 1/2	1-1 1/2 OR 1/2-1	Apply once at 50% to 70% of full bloom. OR Apply twice with the first application at 10% to 30% of full bloom and a second application at 4 to 7 days later or at post-bloom. Do not apply to green or dry leaves within 14 days of harvest or to bare limbs within 30 days of harvest.
Cherry	Early Blight (<i>Coniotheca</i> sp.) Late Blight (<i>Phytophthora</i> sp.)	1 1/2		Apply to the base of the plant on a 14- to 21-day schedule beginning about 2 weeks after transplanting. OR Apply as a foliar spray every 7 to 14 days beginning about 2 weeks after transplanting. Do not apply within 7 days of harvest. Do not make more than 4 applications per season.

BEST AVAILABLE COPY

6049

Page 4
TOPSIN M 70W

Crop	Stages	LOS-40E	LOS-700 Gal	Remarks
Cucurbits (Cucumbers, melons, pumpkins, squashes and watermelons) also for use on Cabbages	Anthracnose (Bacterial Spot Stage) Powdery Mildew Fungal Spot (Cucumbers)	1/2-1/4 for ground applications or 1/2 for aerial applications		Begin applications when plants begin to show or when disease first appears and repeat at 7- to 14-day intervals as needed for Fungal Spot, use 7-day intervals as needed
Beans	Brown Rot (Blackspot up)	1/2-1/4 or 1/2-1/4 of crop (1/2 each row spacing)		Apply TOPSIN M by spraying directly onto the open leaves at the time of planting seed, soil or traffic. Not for use through any type of irrigation system.
Peas	Leaf Spot (Crownrot up)	1/2		Begin applications 25 days after planting or when disease first appears and repeat at 14- to 21-day intervals as needed for the 14-day interval under severe disease pressure. Do not apply within 14 days of harvest.
Peas	Brown Spot (Crownrot up) Bacterial Spot (Bacterial Blight up) Powdery Mildew (Bacterial Blight up) Scab (Fusarium up)	1/2-1		Use the higher rate for areas over 20 feet and for aerial applications in Arkansas, Louisiana, Mississippi, Oklahoma, and Texas. Begin applications when first leaves are showing and repeat at 3- to 4-week intervals until about April. Do not apply after about April.
Tomatoes	Anthracnose (Calyptrogon up) Brown Spot (Septoria up) Fragaria Leaf Spot (Crownrot up) Fruit and Stem Blight (Septoria up) and the associated blight. Phytophthora up) Purple Seed Rot (Crownrot up)	1/2-1		Apply both full bloom and when pods are 1/2 to 1/4 in length. Make a second application 14- to 21-days later. Do not make the second application less than 14 days after pods average 1/2 in length or when beans form in the pod. Use the high rate under severe disease pressure. FOR SEED BLANKS ONLY—For seed quality make a single application at the high rate when beans form in the pod. Do not make more than 2 applications per year. Do not spray or feed treated vines or hay to livestock.
Stem Fruits (peppers) —Aerial	Brown Rot Stem Blight (Stem Blight up) Fruit Brown Rot (Stem Blight up)	1/2	1/2	Apply at early bloom (pink bud). Make a second application at full bloom. In addition, for Fruit Brown Rot, apply 1 or 2 sprays starting 3 weeks before harvest. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and first pre-harvest sprays. Do not apply within 1 day of harvest.
—Cherry	Brown Rot Stem Blight (Stem Blight up) Fruit Brown Rot (Stem Blight up)	1/2	1/2	Apply at early bloom (pink bud). Make a second application at full bloom. In addition, for Fruit Brown Rot, apply 1 or 2 sprays starting 3 weeks before harvest. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and first pre-harvest sprays. Do not apply within 1 day of harvest.
	Cherry Leaf Spot (Crownrot up)	1/2-1/4	1/2-1/4	Apply at pink bud or before, when leaves first unfold, and at first, second and third cover at 10- to 14-day intervals and one spray 14 to 21 days after harvest. Do not apply within 1 day of harvest.
	Powdery Mildew (Powdery Mildew up) and Sphaeria up)	1/2 PLUS 1/2-1/4	1/2 PLUS 1/2-1/4	Apply at early bloom (pink bud). Make a second application at full bloom. PLUS Apply at about full and first cover. Do not apply within 1 day of harvest.
—Mature	Brown Rot Stem Blight (Stem Blight up) Fruit Brown Rot (Stem Blight up)	1/2	1/2	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development. In addition, for Fruit Brown Rot, apply 1 or 2 sprays starting 3 weeks before harvest. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and first pre-harvest sprays. Do not apply within 1 day of harvest.
—Fruit	Brown Rot Stem Blight (Stem Blight up) Fruit Brown Rot (Stem Blight up)	1/2-2/3	1/2-1/4	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development. In addition, for Fruit Brown Rot, apply 1 or 2 sprays starting 3 weeks before harvest. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and first pre-harvest sprays. Do not apply within 1 day of harvest.
	Fruit Rot (Crownrot up)	1/2-2/3 PLUS 1/2-1/4	1/2-1/4 PLUS 1/2-1/4	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development. PLUS Apply at about full and at first cover sprays. Do not apply within 1 day of harvest.

BEST AVAILABLE COPY

CHEMIGATION NOT FOR THIS USE IN CALIFORNIA GENERAL INSTRUCTIONS

Apply this product only through sprinkler irrigation systems including center pivot, lateral move, and low sub (wheel) roll, traveler, big gun, solid set, or hand move. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or delayed pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Do not connect chemigation system to any public water system. Public water system means a system for the provision of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

SYSTEM REQUIREMENTS

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the injection pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

INSTRUCTIONS FOR SPRINKLER (OVERHEAD) IRRIGATION:

Observe the requirements in the System Requirements section above. Do not apply when wind speed favors drift beyond the area intended for treatment.

Apply TOPSIN M only through systems containing anti-siphon and check valves designed to prevent water source contamination or overflow of the mix tank and containing interlocking controls between the metering device and the water pump to ensure simultaneous shut-off.

Maintain a gentle continuous agitation in mix tank during mixing and application to assure a uniform suspension.

Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute suspension per unit time.

Application of more than recommended quantities of irrigation water per acre may result in decreased product performance.

Do not apply when wind speed favors drift, when system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product cannot be flushed and must be dismantled and drained. In a center pivot system, block the nozzle set nearest the well-point/injection unit to prevent spray being applied to this area.

Where sprinkler distribution patterns do not overlap sufficiently, unacceptable disease control may result.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

TOPSIN M may be applied in conjunction with chemically neutral liquid fertilizers. Application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, may cause a degradation of the pesticide, resulting in reduced performance and should be avoided.

Check local restrictions and requirements regarding sprinkler irrigation applications, as they may vary from state to state.

SPRAY PREPARATION

Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water.

Prepare a suspension of TOPSIN M in a mix tank. Fill the tank with 1/2 or 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Slowly add the required amount of TOPSIN M and then the remaining volume of water.

APPLICATION INSTRUCTIONS

Set sprinkler system to deliver @ 1 to 1.25 inches of water per acre. Volumes of water higher than this may reduce efficacy. Start sprinkler and then uniformly inject the suspension of TOPSIN M into the irrigation water line so as to deliver the desired rate per acre. The suspension of TOPSIN M should be injected with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing.

NOTE: When treatment with TOPSIN M has been completed, do not irrigate the treated area for 24 to 48 hours to prevent washing the chemical off the crop.

GROUP	WEEDS	LB/A-CRE	LOS/100 GAL	REMARKS
Fert and Pre-em	Green Star Broadleaf (Bifenthrin up)	1 1/2	1/2	Apply at early bloom (green top). Make a second application at full bloom. In addition, for Green Star, apply 1 or 2 sprays starting 3 weeks before harvest. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final pre-harvest spray. Do not apply within 1 day of harvest.
	Black Head (Bifenthrin up)	1 1/2	1/2	Apply at pre-bloom, full bloom, and at first, second, and third cover sprays at 10- to 14-day intervals. Do not apply within 1 day of harvest.
	Last Seed (Chlorpyrifos up)	1 1/2	1/2	Apply at full bloom, bloom, and at first, second, and third cover sprays at 10- to 14-day intervals and 1 spray 14 to 21 days after harvest. Do not apply within 1 day of harvest.
Stinkbugs	Feet Star (Bifenthrin up) Last Seed (Chlorpyrifos up) Last Seed (Chlorpyrifos up)	1-1		Begin applications at early bloom and continue at 7- to 10-day intervals. Use the higher rate Last of the Feet Star. Monitor and under conditions of severe disease pressure. Do not apply within 1 day of harvest.
Super Seed	Last Seed (Chlorpyrifos up)	1-1/2		Begin applications when disease first appears and repeat at 14- to 21-day intervals as needed. Do not apply within 21 days of harvest.
Super Seed (pre-em only)	Pencap (Bifenthrin up or Chlorpyrifos up)		1/2 (11.800)	Apply to full seed points as a soil or foliar dip. Cold the—immerse seed points to provide thorough coverage, remove and allow to drain.
			1/2 (13.200)	Hot Dip—Maintain temperature of dip at 52°C and soak seed points for 20 minutes, remove and allow to drain. Do not use treated seed pieces for food, feed or fodder. Do not grow or feed treated forage to livestock.

FOR USE ON FALL-SEEDED WHEAT IN IDAHO, OREGON AND WASHINGTON ONLY (Not for use in California)

GROUP	WEEDS	LB/A-CRE	LOS/100 GAL	REMARKS
Fall-Seeded Wheat	Pencap/Bifenthrin up Feet Star Stinkbugger Eye Seed	1 lb @ 7 lb ack		Apply TOPSIN M at the rate indicated in a single application by air or ground after wheat is drilled but before stem elongation has begun. Use sufficient water to obtain thorough coverage. Do not make more than one application per season. Do not cut for hay within 30 days of application. Do not allow livestock to graze on treated areas before harvest.

BEST AVAILABLE COPY

8049

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION

HARMFUL IF SWALLOWED, ABSORBED THROUGH SKIN, OR INHALED.
CAUSES MODERATE EYE IRRITATION. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or spray mist.

Page 6
TOPSIN M 70

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear: long-sleeved shirt and long pants, and shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**User Safety Recommendations:
Users 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 pesticide is toxic to fish.

For terrestrial uses, 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 contaminate water when disposing of equipment washwaters.

BEST AVAILABLE COPY

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Storage Instructions: Store in the original container in a dry area. 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 listed below.

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

Container Disposal Instructions: After bag has been emptied, 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.

WARRANTY AND DISCLAIMER

Elf Atochem 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 referred to therein. ELF ATOCHEM MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL ELF ATOCHEM OR SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, BUSINESS REPUTATION, OR CUSTOMERS; LABOR COST; OR OTHER EXPENSES INCURRED IN PLANTING OR HARVESTING.

Elf Atochem 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 Elf Atochem.

BEST AVAILABLE COPY