

APR 28 1995

Ms. Rebecca A. Clemmer
Agrichemicals Division
Elf Atochem North America, Inc.
2000 Market Street
Philadelphia, PA 19103-3222

Dear Ms. Clemmer:

Subject: Topsin WSB
EPA Reg. No. 4581-377
Your Submission of December 29, 1994

The amendment referred to above, submitted in connection with registration under FIFRA sec. 3(c)(7)(A), is acceptable provided that you:

1. Submit and/or cite all data required for registration and reregistration under FIFRA sec. 3(c)(5) and sec. 4 when the Agency requires all registrants of similar products to submit such data.

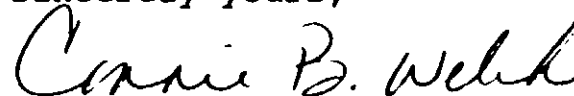
2. Make the following label revision: For onions, revise the remarks column to include directions for broadcast application. Only in-furrow directions are now included.

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 sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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

Sincerely yours,



Connie B. Welch
Product Manager (21)
Fungicide-Herbicide Branch
Registration Division (7505C)

Enclosure

7505C:C.Grable:cq:4/14/95

145

elf atochem

ATO

PROPOSED LABEL

WP

TOPSIN[®] M WSB

IN WATER SOLUBLE BAGS
THIOPHANATE-METHYL FUNGICIDE

70% Wettable Powder

ACCEPTED
EPA COMMENTS
EPA Letter Dated

APR 28 1995

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. 4581-377

ACTIVE INGREDIENT:

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

INERT INGREDIENTS:

TOTAL

70.0%

30.0%

100.0%

*Also known as dimethyl 4,4'-o-phenylenebis[3-thioallophanate]

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: 3,769,308; 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 Additional Worker Protection Standard Directions.

EPA REGISTRATION NO. 4581-377

EPA ESTABLISHMENT NO. 5905-AR-1

Net Weight: _____ Pounds (_____ Kgs)

SOLD BY

ELF ATOCHEM NORTH AMERICA, INC
AGCHEM DIVISION

2000 Market Street, Philadelphia, PA 19103

BEST COPY AVAILABLE

DIRECTIONS FOR USE

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.

GENERAL INFORMATION

Apply TOPSIN M WSB with ground or aerial equipment, using sufficient volume of spray to provide thorough coverage. Continuous agitation is required to keep the material in suspension. ELF Atochem does not recommend tank mixes 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.

Use the LBS/ACRE rate for concentrate sprays (less than 400 gallons on apples, less than 300 gallons on stonefruit). Use the LBS/100 GAL rate for dilute ground applications. For aerial applications, use a minimum of 3 gallons/A for row crops, and a minimum of 10 gallons/A for tree crops. Higher spray volume will generally result in better coverage and better disease control.

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

RESISTANCE MANAGEMENT: To avoid the development of tolerant or resistant strains of fungi, TOPSIN M should always be tank-mixed with a fungicide of different chemistry, and/or a fungicide of different chemistry should be alternated with TOPSIN M at each application. ELF ATOCHEM DOES NOT RECOMMEND THE USE OF PRODUCTS CONTAINING BENOMYL OR THIABENDAZOLE IN COMBINATION OR IN ROTATION WITH TOPSIN M. If after using TOPSIN M as recommended, the treatment is not effective, a tolerant or resistant strain of fungi may be present. Discontinue the use of TOPSIN M for at least one season. Do not use products containing benomyl or thiabendazole as substitutes for TOPSIN M, as they are of similar chemistry and will contribute to the development of resistance. As long as these precautions are followed, TOPSIN M can be useful for disease control, even if resistant strains are present.

MIXING INSTRUCTIONS

TOPSIN M WSB consists of a protective outer resealable package containing water soluble bags. First fill the spray tank with approximately half the required volume of water. Begin agitation. Remove the required number of unopened water soluble bags from the outer package and add to the tank. Reseal outer bag to protect any unused bags. Avoid adding bags near recirculation outlets as they might block them before being fully dissolved.

- Do not allow the bags to become wet prior to adding to the tank.
- Do not handle water soluble bags with wet hands or wet gloves.

Depending on the degree of agitation and water temperature, the water soluble bags should be completely dissolved and ready to spray within 5 minutes. If other materials are to be added to the tank, especially fertilizers high in nitrogen or boron, wait until the TOPSIN M WSB is fully dissolved before adding them. Once all materials have been added, fill the tank with the remaining volume of water. Maintain continuous agitation at all times, and use the spray suspension as soon as possible.

CONVERSION TABLE

ACRES TREATED PER 1 LB WATER SOLUBLE BAG

LABEL USE RATE LBS/A TOPSIN M WSB	ACRES TREATED WITH ONE WATER SOLUBLE BAG
1/4 LB	4.0
1/2 LB	2.0
1 LB	1.0

CONVERSION TABLE

ACRES TREATED PER 5 LB WATER SOLUBLE BAG

LABEL USE RATE LBS/A TOPSIN M WSB	ACRES TREATED WITH ONE WATER SOLUBLE BAG
1/4 LB	20.0
1/2 LB	10.0
1 LB	5.0

CROP	DISEASES	LBS/ACRE	LBS/100 GAL	REMARKS
Almonds	Brown Rot Blossom Blight (Monilia sp.)	1-2		Apply at early pink bud fall
Apples	Apple Scab (Venturia sp.) Flyspeck (Zygophiala sp.) Powdery Mildew (Podosphaera sp.) Sooty Blotch (Gloeodes sp.) Black Rot (Botryosphaeria sp.) Brooks Fruit Rot (Mycosphaerella sp.)	1-1 1/2	1/4	Apply at 5- to 10-day green tip through petal fall to 14-day intervals
Beans	Gray Mold (Botrytis sp.) White Mold (Sclerotinia sp.)	1-2 OR 1-1 1/2		Apply once at 50% to bloom OR Apply twice with the first 10% to 30% of full bloom application at 4 to 7 days after peak bloom Do not apply to snap beans 14 days of harvest or within 26 days of harvest
Celery	Early Blight (Cercospora sp.) Late Blight (Septoria sp.)	1/2		Apply to the base of the plant to 21-day schedule beginning 2 weeks after transplant OR Apply as a foliar spray beginning about 2 weeks after transplanting Do not apply within 7 days of harvest Do not make more than 2 applications per season
Cucurbits (Cucumbers, melons, pumpkins, summer and winter squash)	Anthrachnose (Colletotrichum sp.) Gummy Stem Blight (Didymella sp.) Powdery Mildew (Erysiphe sp.) Target Spot (Corymycophora sp.)	1/2-1/4 for ground applications OR 1/2 for aerial applications		Begin applications when run or when disease begins to repeat at 7-14 day intervals as needed For Target Spot, use as needed
California use only for Powdery Mildew control	Belly Rots (Rhizoctonia/ Fusarium sp.)	4		For Belly Rots, apply in to allow runoff to the soil. Will not control Pythium
Onions	White Rot (Sclerotium sp.)	1/2-1 lb/1000 ft of row (12 inch row spacing) OR 12-16 lbs Broadcast		Spray directly into the time of planting seed. Not for use through irrigation system
Peanuts	Leaf Spot (Cercospora sp.) Rust (Puccinia) Limb Rot (Rhizactonia)	1/2		Begin applications 35 days planting or when disease and repeat at 7- to 14-day intervals as needed. Use the 7-day severe disease pressure. Do not apply within 14 days of harvest
Pecans	Scab (Fusicladium sp.) Brown Spot (Cercospora sp.) Downy Spot (Mycosphaerella sp.) Powdery Mildew (Microspora sp.) Liver Spot (Guignardia sp.) Stem End Blight (Botryosphaeria sp.) Zonate Leaf Spot (Cristulariella sp.)	1/2-1		Begin applications when showing and repeat at intervals until shruck stage. Use the higher rates for tank and for aerial application. Arkansas, Louisiana, Mississippi, Oklahoma and Texas. Do not apply after shruck
Soybeans	Anthrachnose (Colletotrichum sp.) Brown Spot (Septoria sp.) Frog-eye Leaf Spot (Cercospora sp.) Pod and Stem Blight (Diaperella sp. and the imperfect stage Phoma sp.) Purple Seed Stain (Cercospora sp.)	1-1		Apply from full bloom to 14 days after length. Make application 14- to 21-day intervals. Make the second application 14 days after pods are 1/2 when beans form in high rate under severe disease pressure. FOR SEED BEANS ONLY, quality using a single application. Do not make more than 2 applications per year. Do not graze or feed to livestock
Stone Fruit - Apricots	Brown Rot Blossom Blight (Monilia sp.) Fruit Brown Rot (Monilia sp.)	1/2	4	Apply at early bloom in regions application of them for Fruit B. 2 sprays starting 3 weeks before harvest. Apply additional sprays at intervals between full bloom and pre-harvest sprays. Pre-harvest interval 1 day

NOTE: Dilute sprays are not to exceed maximum rate per acre

BEST COPY AVAILABLE

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

CROP	DISEASES	LBS./ACRE	LBS./100 GAL	REMARKS
Cherries	Brown Rot Blossom Blight (<i>Monilinia</i> sp.) Fruit Brown Rot (<i>Monilinia</i> sp.)	1 1/2	1/2	Apply at early bloom (early popcorn). 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 final pre-harvest sprays. Pre-harvest interval: 1 day
	Cherry Leaf Spot (<i>Coccomyces</i> sp.)	1 1/2-1 3/4	3/4-1	Apply at petal fall or before, when leaves first unfold, and at first, second and third cover at 10- to 14-day intervals and on spray 14 to 21 days after harvest. Pre-harvest interval: 1 day
	Powdery Mildew (<i>Podosphaera</i> sp.) and (<i>Sphaerotheca</i> sp.)	1 1/2 PLUS 1 1/2-1 3/4	3/4 PLUS 3/4-1	Apply at early bloom (early popcorn). Make a second application at full bloom. PLUS Apply at shuck fall and first cover. Pre-harvest interval: 1 day.
—Nectarines	Brown Rot Blossom Blight (<i>Monilinia</i> sp.) Fruit Brown Rot (<i>Monilinia</i> sp.)	1 1/2	3/4	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 final pre-harvest sprays. Pre-harvest interval: 1 day
—Peaches	Brown Rot Blossom Blight (<i>Monilinia</i> sp.) Fruit Brown Rot (<i>Monilinia</i> sp.)	1 1/2-2 1/4	3/4-1	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 final pre-harvest sprays. Pre-harvest interval: 1 day
	Peach Scab (<i>Cladosporium</i> sp.)	1 1/2-2 1/4 PLUS 1 1/2-1 3/4	3/4-1 PLUS 3/4-1	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development. PLUS Apply at shuck split and at first cover sprays. Pre-harvest interval: 1 day
—Plums and Prunes	Brown Rot Blossom Blight (<i>Monilinia</i> sp.) Fruit Brown Rot (<i>Monilinia</i> sp.)	1 1/2	3/4	Apply at early bloom (green tip). 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 final pre-harvest sprays. Pre-harvest interval: 1 day
	Black Knot (<i>Dibotryon</i> sp.)	1 1/2	3/4	Apply at pre-bloom, petal fall, and at first, second and third cover sprays at 10- to 14-day intervals. Pre-harvest interval: 1 day
	Leaf Spot (<i>Coccomyces</i> sp.)	1 1/2	3/4	Apply at petal fall, shuck, and at first, second, and third cover sprays at 10- to 14-day intervals and 1 spray 14 to 21 days after harvest. Pre-harvest interval: 1 day.
Strawberries	Fruit Rot (<i>Botrytis</i> sp.) Leaf Blight (<i>Dendrophoma</i> sp.) Leaf Scorch (<i>Diplazium</i> sp.)	3/4-1		Begin applications at early bloom and continue at 7- to 10-day intervals. Use the higher rate East of the Rocky Mountains and under conditions of severe disease pressure. Pre-harvest interval: 1 day
Sugar Beets	Leaf Spot (<i>Cercospora</i> sp.)	3/4-1		Begin applications when disease first appears and repeat at 14-day intervals or as needed. Pre-harvest interval: 21 days
Sugar Cane (Hawaii only)	Pineapple Disease (<i>Thielaviopsis</i> sp.) or <i>Ceratocystis</i> sp.)		3/4 (1.1 600)	Apply to cut seed pieces as a cold or hot dip. Cold Dip—immerse seed pieces to provide thorough coverage, remove and allow to drain.
			3/4 (1.3 200)	Hot Dip—Maintain temperature of dip at 52°C and soak seed pieces for 20 minutes, remove and allow to drain. Do not use treated seed pieces for food feed or fodder. Do not graze or feed treated forage to livestock.

NOTE: Dilute sprays are not to exceed maximum rate per acre

CROP	DISEASES	LBS./ACRE	LBS./100 GAL	REMARKS
Fall-Seeded Wheat	<i>Pseudocercospora</i> sp. (Foot Rot) Strawbreaker Eye Spot	1 lb (0.7 lb aVA)		Apply TOPSIN M WSB at the rate indicated in a single application by air or ground after wheat is tillered 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 90 days of application. Do not allow livestock to graze in treated areas before harvest.

NOTE: Dilute sprays are not to exceed maximum rate per acre

CHEMIGATION
NOT FOR THIS USE IN CALIFORNIA
GENERAL INSTRUCTIONS

Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (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 illegal 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 irrigation 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 WSB 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 insure 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/pivot/injection unit to prevent spray being applied to this area.
Where sprinkler distribution patterns do not overlap sufficiently, acceptable 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 WSB 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 WSB 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 WSB and then the remaining volume of water. Refer to Mixing Instructions in previous section.

APPLICATION INSTRUCTIONS

Set sprinkler system to deliver 0.1 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 WSB into the irrigation water line so as to deliver the desired rate per acre. The suspension of TOPSIN M WSB should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing.

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

5 of 5

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.

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.

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

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

5