

22555-4

PM 23

1987

SEP 28 1987

Mr. Mark G. Wiltse  
Scoller Chemical Company, Inc.  
8582 Katy Freeway, Suite 200  
Houston, TX 77024

Dear Mr. Wiltse:

Subject: Amendment - Revised Labeling  
Top Cop Tri-Basic Flowable Fungicide/Bactericide  
EPA Registration No. 22555-4  
Your Submission Dated August 14, 1987

The labeling 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 changes listed below before you release the product for shipment bearing the amended labeling:
  - a. Add "Causes eye irritation" to the Human Hazards statements.
  - b. Modify Endangered Species labeling, replacing existing language with that in PR Notice 87-5.
  - c. On Supplemental Labeling for Chemigation, delete paragraph 5 on page 1 since the devices from paragraph 2 serve the same purpose for public water systems. Use of both sets of instructions would be confusing. Change "irrigation pump" to "injection pump" in Non-Public Water System instructions.
3. Submit one (1) copy of your final printed labeling before you release the product for shipment.

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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,

Richard F. Mountfort *RFM*  
Product Manager (23)  
Fungicide-Herbicide Branch  
Registration Division (TS-767C)

Enclosure

FRONT PANEL

# TOP COP TRI-BASIC

FLOWABLE FUNGICIDE/BACTERICIDE

## PRECAUTIONARY STATEMENTS

Hazards to Human and Domestic Animals

### CAUTION

Do not apply this product in such a manner as to directly or through drift expose persons or other persons. The area being treated must be vacated by unprotected persons. Do not enter treated areas without protective clothing until sprays have dried.

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. (Indicate specific oral warnings which inform workers of areas or fields that may not be entered without specific protective clothing, period of time field must be vacated and appropriate actions to take in case of accidental exposure.) When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: CAUTION Area treated with TOP-COP TRI-BASIC Flowable Fungicide/Bactericide (name of application). Do not enter without appropriate protective clothing until sprays have dried. In case of contact, flush skin or eyes with plenty of clear water; if eyes, get medical attention.

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.

### ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic organisms. Do not apply directly to water. Do not apply where runoff is likely to occur. Drift and runoff from treated areas may be hazardous to fish and aquatic organisms in adjacent aquatic sites. Do not contaminate water by cleaning of equipment or disposal of wastes.

### ENDANGERED SPECIES RESTRICTIONS

It is a violation of Federal laws to use any pesticide in a manner that results in the death of an endangered species or adverse modification of their habitat. The use of this product may pose a hazard to certain Federally designated endangered species known to occur in specific areas within the following counties:

STATE	Species (Bulletin No.)	COUNTY
CALIFORNIA	Solano Grass (EPA/ES-85-13)	Solano
TENNESSEE	Stackwater Darter (EPA/ES-85-04)	Lawrence Wayne Hancock
	Freshwater Mussels (EPA/ES-85-07)	Clallborne Hawkins Sullivan
ALABAMA	Stackwater Darter (EPA/ES-85-05)	Lauderdale Limestone Madison
VIRGINIA	Freshwater Mussels (EPA/ES-85-08)	Grayson Smyth Scott Lee Washington

Before using this product in the above counties you must obtain the EPA Bulletin specific to your area. This Bulletin identifies areas within these counties where the use of this pesticide is prohibited, unless specified otherwise. The EPA Bulletin is available from either your County Agricultural Extension Agent, the Endangered Species Specialist in your State Wildlife Agency Headquarters, or the appropriate regional Office of the U.S. Fish and Wildlife Service. THIS BULLETIN MUST BE REVIEWED PRIOR TO PESTICIDE USE.

### ACTIVE INGREDIENT:

Copper (In basic copper sulfate)

expressed as metallic

INERT INGREDIENTS:

Total

Contains 4.2 pounds copper/gal

ACCEPTED  
with comment  
SEP 28 1987  
29.0%  
71.0%  
100.0%  
22533-4

## MIXING DIRECT

## RECOMMENDATIONS

Fill the spray tank approximately half full of water. Add the required amounts of TOP COP TRI-BASIC. Add water until tank is full and when a spreader/sticker is recommended. Fill the spray tank and keep agitator running.

## KEEP OUT OF REACH OF CHILDREN

### CAUTION

#### STATEMENT OF PRACTICAL TREATMENT:

If swallowed, induce vomiting.

If on skin, remove by washing.

If in eyes, wash with large amounts of water and get medical attention.

Harmful if swallowed. Avoid breathing spray mist. May cause irritation of nose, throat or skin. Avoid contact with skin and eyes. Protective clothing (long pants, long sleeve shirt, gloves, hat and boots) must be worn during mixing and loading. In case of skin contact, remove with washing; for eyes, wash with copious amounts of water and get medical attention. May cause skin sensitization in certain individuals.

SEE LEFT SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

## METHODS OF APPLICATION

Spray applications can be made by ground equipment for uniform coverage as suggested on the back of the label. Chemigation: For injection in sprinkler irrigation systems available from your chemical supplier.

### NOTICE - Read Carefully.

Conditions of Sale: Stoller (and Seller) offer(s) this product to the buyer and all users are deemed to have accepted and warranty which may only be varied by written representative of Stoller.

Warranty Limitation: Stoller warrants this product to be as labeled and reasonably fit for the purpose for use on the label subject to the inherent risk of no other express warranties. There is no implied warranty which extends beyond the inherent risks. The directions for use of this product should be followed carefully. However, it is not a warranty. Buyer assumes all risks associated with use. Buyer assumes all risks associated with this product contrary to label instructions or recommendations.

Limitation of Liability: In no case shall Stoller be liable for sequential damages resulting from the use or handling of any kind shall be greater in amount than the purchase price of which such damages are claimed.

## STORAGE AND DISPOSAL

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

Protect from freezing: This product freezes at 30°F.

Stacking Instructions: When storing pallets, stack two pallets high on the pallet, with a maximum of two pallets high.

If container is leaking or damaged, transfer contents and label to suitable container - avoid prolonged storage or exposure to mild steel. Absorb spills with dry absorbent and dispose of as directed below.

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

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Net Volume: 5 Gallons

Net Weight of Contents: 69.5 Pounds

EPA Reg. No. 22555-4

EPA Establishment No.

(LM) (PO) (FC)  
22555-MS-1, 67480-GA-1, 22555-CA-1,  
(GF) (MC) (EF)  
22555-MH-1, 22555-NC-1, 22555-FL-1

Each prescript corresponds to first letters of lot number on pallet.

## MANUFACTURER

Stoller Chemical Co.

8582 Katy

Houston

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# DIRECTIONS FOR USE

Crop	Diseases Controlled	Amount to Use	Minimum Spray Volume	Application Guide
<b>FRUITS AND NUTS</b>				
Almonds	Shot Hole Brown Rot	4 to 7 gal/A	Dilute-470 gal/A Concentrate-25 gal/A Aerial-30 gal/A	Dormant application should use higher rates. Bud spray should be applied at pink bud through popcorn stage at lower rates. Spray before 50% bloom and do not spray when trees are in leaf.
Apricots	Shot Hole Brown Rot	4 to 8 gal/A	Dilute-300 gal/A Concentrate-25 gal/A Aerial-20 gal/A	Dormant application to control Shot Hole or bud blight should be applied at higher rates. Brown Rot control sprays should be applied through bud stage up to popcorn stage at lower rates. Do not spray when trees are in leaf.
Peaches	Anthracnose Blight Scab	1 1/2 to 2 gal/100 gal.	Spray to wet	Begin treatment when blossom buds open. Repeat at 4 week intervals for a total of 5 applications. Apply only within 140 days of bloom.
Berries Blackberries Boyenberries Dorberries Loganberries Raspberries	Anthracnose Leaf and Cone Spot	1 1/2 to 2 gal/100 gal.	Spray to wet	Begin spray when leaf buds begin to open. Repeat when flower buds show white and continue at 10 to 14 day intervals.
Cherries (Sour)	Yellow rust	1 1/2 to 2 gal/100 gal.	Spray to wet	Postharvest spray after pruning, but before fall rain.
	Shot Hole Brown Rot Blossom Blight	3 gal/100 gal. 1 gal/100 gal.	Spray to wet Spray to wet	Apply on dormant spray only. Apply at popcorn and late bloom stages. In late bloom stage spray, add 5 pounds hydrated lime per 100 gallons.
	Leaf Spot	2 gal/100 gal.		Apply at petal fall. Add hydrated lime.
Citrus Grapefruit Lemons Limes	Melanosis	2 to 4 gal/A	Dilute-1500 gal/A Concentrate-25 gal/A Aerial-10 gal/A	Apply 1 to 3 weeks after petal fall, where there is a history of disease problems; a wet spring or late or scattered bloom, apply a second spray 4 weeks later. Adding flowable sulfur may improve control.
Oranges Tangelos Tangerines	Scab	2 to 4 gal/A	Dilute-1500 gal/A Concentrate-25 gal/A Aerial-10 gal/A	Apply just before flush and again at 1/2 petal fall. If scab is likely to be severe, use double the rate in the first spray. Under conditions of high moisture, spray summer and fall flushes when new growth begins to appear.
	Greasy Spot	1 to 2 gal/A	Dilute-1500 gal/A Concentrate-25 gal/A Aerial-10 gal/A	Sprays may be applied at any time during the two months after expansion of early spring flush and within one month after expansion of late spring or other flushes. For greasy spot and pink pitting, make a summer spray. Apply when disease occurs or immediately on appearance of affected fruit. DO NOT use on Valencia.
	Brown Rot	1 to 1 1/2 gal/A	Dilute-1500 gal/A Concentrate-25 gal/A Aerial-10 gal/A	
Note: TOP COP 31 Basic Flowable Fungicide/Bactericide is compatible with all sprays used on citrus. This use of copper and oil combinations should be avoided after the fruit has attained a size of 1/4 inch in diameter and during hot sun.				
Fibers	Bacterial Blight	1 gal/100 gal plus 1 pint superior type oil	Spray to wet	Apply in early fall. In season of heavy rainfall, apply again when three fourths of leaves have dropped.
Grapes	Anthracnose Black Rot Downy Mildew	1 to 1 1/2 gal/A	Dilute-200 gal/A Concentrate-25 gal/A	Make first application when new growth is 1/2 inch long and repeat every 10 to 14 days.
Hops	Downy Mildew	1 gal/100 gal.	Spray to wet	Apply as a crown treatment (after pruning but before training). After training, treat at 10 day intervals. Discontinue use 2 weeks before harvest.
Olive	Leaf Spot (Pecock Spot)	1/2 to 1 gal/A	Dilute-300 gal/A Concentrate-25 gal/A	Apply in fall. Use lower rates where less than 10 inches of rainfall is expected.
Peaches - Nectarines	Brown Rot Peach Blight (Shot Hole) Leaf Curl Peach Blight Bacterial Diseases	1 to 1 1/2 gal/A 1 1/2 gal/A	Dilute-300 gal/A Concentrate-25 gal/A Aerial-20 gal/A	Apply before bud swell and in full pink bud stage. DO NOT apply after pink bud or after trees are in leaf as injury may occur. Apply in fall before fall rains begin. (11/15 to 12/15)
Pears and Apples	Fire Blight	1 1/2 gal/A	Dilute-400 gal/A Concentrate-25 gal/A	Apply at 10% bloom and repeat at 5 to 7 day intervals during bloom. DO NOT use on Delicious, Concord or Seckel varieties.
Plums and Prunes	Brown Rot Shot Hole	1 gal/A	Dilute-300 gal/A Concentrate-25 gal/A Aerial-20 gal/A	Apply at early green bud and full popcorn stages. Apply as dormant treatment before heavy fall rains.
Strawberries	Leaf Spot	2 gal/100 gal.	Spray to wet	Apply prebloom and postbloom.
Walnuts	Blight	2 to 2 1/2 gal/100 gal.	Dilute-300 gal/A Concentrate-25 gal/A Aerial-20 gal/A	Begin application in early prebloom (1% pistillate and catkins bloom showing). Apply second application during 10 to 20% pistillate and catkin bloom are showing. Repeat applications 3 to 4 days.

Crop	Diseases Controlled	Amount to Use	Minimum Spray Volume	Application Guide
<b>VEGETABLES AND FIELD CROPS</b>				
Asparagus	Carrots Leaf Spot Lettuce Leaf Spot	1 quart/A	Ground-20 gal/A Aerial-5 gal/A	Apply 14 to 21 days before harvest or earlier if disease threatens. Avoid spraying sensitive varieties such as Lakeland.
Beans	Angular Leaf Spot Anthracnose Bacterial Blight Downy Mildew	1 to 1 1/2 gal/A	Ground-20 gal/A Aerial-5 gal/A	Begin treatment when plants are about 5 inches tall and repeat at 5 to 7 day intervals.
Beets	Downy Mildew Leaf Spot	1 to 2 gal/A	Ground-20 gal/A Aerial-5 gal/A	Begin when disease first appears and repeat every 7 to 10 days.
Sugar Beets	Carrots Leaf Spot	2 1/2 gal/A	Ground-20 gal/A Aerial-5 gal/A	Begin when disease first appears and repeat every 7 to 10 days.
Cole crops: Broccoli Brussels sprouts Cabbage Cauliflower Cobanole Kohlrabi Mustard Radishes Turnips Carrots	Downy Mildew Carrots Leaf Spot Alternaria Leaf Blight	1 to 2 gal/A	Ground-20 gal/A Aerial-5 gal/A	Begin when plants are above ground in plant bed or before disease normally appears. Repeat at 7 to 10 days intervals in plant bed and field.
Celery	Bacterial Blight Early Blight Late Blight	1 to 2 gal/A	Ground-20 gal/A	Treat every 7 days after emergence.
Cucurbits Cantaloupes Cucumbers Melons Pumpkins Squash	Angular Leaf Spot Anthracnose Alternaria Leaf Spot Bacterial Wilt Downy Mildew Powdery Mildew Bacterial Stem Blight Leaf Spot Scab	1 to 2 gal/A	Ground-20 gal/A Aerial-5 gal/A	Begin treatment when plants begin to vine and repeat every 7 to 10 days. In dense plantings, sprays every 3 to 4 days may be required. A pre-emergence application may help decrease infections of Angular leaf spot, Anthracnose and Alternaria leaf spot.
Eggplant	Alternaria Blight Anthracnose Phomopsis	1 1/2 to 2 gal/A	Ground-20 gal/A Aerial-5 gal/A	Begin in plant bed or in field before disease appears. Repeat at 7 to 10 day intervals.
Lettuce	Downy Mildew	2 to 3 gal/A	Ground-20 gal/A Aerial-5 gal/A	Begin treatment when disease first appears and repeat at 7 to 10 day intervals.
Onions	Purple Blotch Downy Mildew	2 gal/A	Ground-20 gal/A Aerial-5 gal/A	Begin when plants are 4 to 6 inches and repeat at 7 to 10 day intervals.
Peppers	Anthracnose Bacterial Spot Early Blight Carrots Leaf Spot Downy Mildew	1 1/2 to 2 gal/A	Ground-20 to 40 gal/A Aerial-10 gal/A	Start sprays in seed bed and continue in field at 7 day intervals. During fruiting use higher rate and volume.
Potatoes	Early Blight Late Blight	2 to 3 gal/A	Ground-20 to 40 gal/A Aerial-10 gal/A	Begin when plants emerge and repeat at 7 to 10 day intervals.
Peanuts	Carrots Leaf Spot	1 to 2 gal/A	Ground-20 gal/A Aerial-5 gal/A	Repeat at 10 to 14 day intervals through season. The addition of THF Flowable Sulfur at 2 quarts per acre will enhance leaf spot control.
Spinach	Anthracnose Carrots Leaf Spot Downy Mildew White Rot	2 gal/A	Ground-20 gal/A Aerial-5 gal/A	Begin when disease first appears. Repeat at 7 to 10 day intervals.
Tomatoes	Anthracnose Bacterial Spot Bacterial Canker Early Blight Late Blight Leaf Mold Nail Head Rust Septoria Leaf Spot Symphytum Leaf Spot	2 gal/A	Ground-20 to 40 gal/A Aerial-10 gal/A	Begin in seed bed or field before disease appears. Repeat at 7 to 10 day intervals. A tank mix with Mancozeb seed at labeled rates, controls broad range of tomato diseases. Observe all cautions and limitations on the label of all products used in mixtures.
Wheat and Barley	Septoria Leaf Blotch Helminthosporium Spot Blotch	3 to 4 gal/A	Ground-20 gal/A Aerial-5 gal/A	Make first application at early heading and follow with second application 10 days later.

Frost Injury Protection: Bacterial Ice Nucleation Inhibitor—apply at recommended labeled rates for crops just prior to anticipated frost condition will provide control of ice nucleating bacteria (*Pseudomonas syringae*, *Erwinia herbicola* and *Pseudomonas fluorescens*) and thus provide protection against frost loss.

Not recommended for those geographical areas where weather conditions favor severe frost.

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Apply this product only through a sprinkler such as a Center Pivot, lateral move, side (wheel) roll, solid set or hand move irrigation system.

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 non uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service Specialist, equipment manufacturer or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label - prescribed safety devices for public water system are in place.

A person knowledgeable of the chemigation systems 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.

#### Public Water Systems Connections

Public water system means a system for the provision to the public 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.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water systems should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top of overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

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 contain a functional, normally closed, solenoid-operated valve located on the intake side of 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 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 system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump when the water pressure decreases to the point where pesticide distribution is adversely affected.

Non-Public Water Systems Connections

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 irrigation 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.

General Recommendations

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 Top Cop Tri Basic and capable of being fitted with a systems interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Top Cop Tri Basic fungicide/bactericide can be injected directly into the system undiluted or may be diluted with water and with agitation mixed with other pesticides or fertilizers prior to injection. Once diluted, agitation must be maintained until injected or settling will occur.

For center pivot lateral move and side roll systems, apply continuously during the last full coverage with a fixed minimum water setting and maintain constant speed of movement.

For hand move or solid set system, apply during the final 15 minutes of the irrigation period.

Use the minimum amount of water required to get full even coverage and yet avoid excessive run off.

Calibrate system by adjusting the injector to deliver product at the required rate using the following equation to calculate amount required

Acres in circle or Acres to be treated x	Gallons of TOP COP TRI BASIC recommended per acre	x 128	=	Ounces of undiluted TOP COP Tri Basic to be injected per minute
<hr/>				
Number of Hours to complete cycle or cover area	60			

Apply only through properly maintained irrigation system providing uniform distribution of water. Where a system does not provide uniform water distribution, such as at the extreme ends of the lateral, around supports, or where extreme changes in elevation occur, unacceptable disease control may occur. Because of uneven distribution of treated discharge water from water-powered motors, pesticide applications through water-powered systems are not recommended.

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Subsequent operation of the system before several days have elapsed after the spray dries may result in decreased product performance by removing the pesticide from the zone of effectiveness.

Do not apply when system connections or fittings leak, when nozzles do not provide uniform distribution, or when lines containing the product must be dismantled or drained.

Flush all lines following injection of Top Cop Tri Basic to avoid product settling in lines.

### N O T I C E

#### Read Carefully

Conditions of Sale: Stoller (and Seller) offer(s) this product for sale subject to (and buyer and all users are deemed to have accepted) the following conditions of sale and warranty which may only be varied by written agreement of a duly authorized representative of Stoller.

Warranty Limitation: Stoller warrants this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the directions for use on the label subject to the inherent risks referred to below. Stoller makes no other express warranties. There is no implied warranty or merchantability and there are no warranties which extend beyond the description on the label hereof.

Inherent Risks: The directions for use of this product are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks associated with use. Buyer assumes all risks associated with use or application of this product contrary to label instructions or resulting from extraordinary weather conditions.

Limitation of Liability: In no case shall Stoller be liable for special indirect or consequent damages resulting from the use or handling of this product and no claim of any kind shall be greater in amount than the purchase price of the product in respect of which such damages are claimed.

