1812-381 1/19/2001 Pg 1 of 32

10/06/00

Tenn-Cop® 5E

g381s00a

FUNGICIDE/BACTERICIDE

EMULSIFIABLE LIQUID

ACCEPTED
JAN 19 2001
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 1812-381

Active Ingredient	
Copper salts of fatty and rosin acids*	58.0%
Inert Ingredients	42.0%
Total	100.0%

(* Metallic Copper equivalent 5.14%)

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF SWALLOWED: Drink promptly a large quantity of milk, egg whites, or gelatin solution, or, if these are not available, drink large quantities of water. Do not induce vomiting as it may cause aspiration pneumonia. Avoid alcohol. Call a physician immediately.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably by mouth-to-mouth. Get medical attention.

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

NOTE TO PHYSICIAN: For medical emergencies involving this product, call toll free 1-888-324-7598.

See Label for Additional Precautions and Directions for Use.

Griffin L.L.C.
Valdosta, GA 31601

EPA Reg. No. 1812-381
EPA Est. No.

Net Contents _____

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)
CAUTION

Contains petroleum distillates. Causes skin irritation and moderate eye irritation. Harmful if swallowed, absorbed through the skin or inhaled. ~~Causes moderate eye irritation~~. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:
- Coveralls over short-sleeved shirt and short pants
- Chemical resistant gloves such as nitrile rubber, neoprene rubber or polyvinyl chloride
- Chemical resistant headgear for overhead exposure
- Chemical resistant apron when cleaning equipment, mixing, or loading
- Protective eyewear
- Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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.

Engineering Controls Statement:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic organisms. Do not apply directly to water, or areas where surface water is present or to intertidal areas below the mean high water mark. Do not

contaminate water when disposing of equipment washwaters.

PHYSICAL OR CHEMICAL HAZARDS

~~Do not spray into or near fire or open flames.~~
Combustible. Do not use or store near heat or open flame.

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 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 intervals. 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 over short-sleeved shirt and short pants
- Chemical resistant gloves such as nitrile rubber, neoprene rubber or polyvinyl chloride
- Chemical resistant headgear for overhead exposure
- Protective eyewear
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

~~Do not enter~~ Keep unprotected persons out of treated area ~~without protective clothing~~ until sprays have dried.

STORAGE AND DISPOSAL

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

STORAGE: Store in a cool, dry, secure place away from fire or open flame. ~~Open dumping is prohibited~~. Keep container closed and reseal after use. Product is not damaged by freezing, but preferably store at temperatures above 32° F. If spilled, use absorbent materials and dispose of in an approved landfill.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities, or plastic containers by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

GENERAL INSTRUCTIONS

Tenn-Cop 5E may be applied up to day of harvest.

Tenn-Cop 5E may be applied as an aerial, ground dilute or ground concentrate spray unless specifically directed otherwise in the specific crop use directions.

The per acre use rate of Tenn-Cop 5E is applicable for both dilute and concentrate spraying. Depending upon the equipment used and the specific crop, the spray volume applied per acre will differ. Refer to Minimum Recommended Spray Volume Table. Complete spray coverage is essential to assure optimum performance from Tenn-Cop 5E. When treating by aerial application or with low volume application equipment, unless you have had specific previous experience, it is advisable to test for compatibility and tolerance to crop injury prior to full scale commercial utilization.

Consult the Tenn-Cop 5E label for specific rates and timing of application by crop. Where application rates and intervals are provided in a range (e.g. 4 to 6 pints and 7 to 10 days), higher rates and shorter intervals are recommended when rainfall is heavy and/or disease pressure is high. Use the higher rates for large mature tree crops.

SPECIAL PRECAUTIONS

* Tenn-Cop 5E **should not be applied** in a spray solution having a pH of less than 6.5 as phytotoxicity may occur.

* Do not tank mix Tenn-Cop 5E with Aliette® fungicide for use on any registered crops or ornamentals unless appropriate precautions have been taken to buffer the spray solution because severe phytotoxicity may result. Do not tank mix with products containing diazinon or thiophanate-methyl or with chelated or liquid fertilizers. Use in accordance with the most restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

* This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.

* Environmental conditions such as extended periods of wet weather, acid rain, etc. which alter the pH of the leaf surface may affect the performance of Tenn-Cop 5E resulting in possible phytotoxicity or loss of effectiveness.

* Agricultural chemicals may perform in an unpredictable manner when tank mixed, especially where several products are involved. Reduced effect on pests or crop injury may occur. Unless recommended on this label or by a state/local expert, it is advisable to test for compatibility and potential crop injury prior to commerical use of a new tank mix; otherwise, tank mixing should not be undertaken.

* It must be determined if proper application equipment is available and if waste associated with its use can be properly handled. Agricultural chemicals are often reactive with the materials used in the construction of application equipment, such as aluminum, rubber and synthetic materials. This factor should be taken into consideration when selecting proper application equipment. It is necessary that all application equipment be thoroughly flushed with clean water after each day's use.

* Do not apply this product through any irrigation (chemigation) system using aluminum parts or components as damage to the system may occur. Such application is prohibited regardless of whether the irrigation system is flushed with water after use of this product.

* Apply this product only through one or more of the following types of systems: sprinkler, including center pivot, lateral move, traveler, big gun, or plastic pipe solid set

system(s) which contain no aluminum parts or components. Do not apply this product through any other type of irrigation system.

* While volume is important in obtaining full spray coverage, often factors such as foliage density, environmental conditions and sprayer calibration have a greater impact. Always be sure that sprayers are calibrated to spray equipment manufacturer's specifications and environmental conditions are within those recommended by State and local regulatory authorities.

* When mixing, fill spray tank one-half full with water. Add Tenn-Cop 5E slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. When mixing with other products, wettable powders should be added first, followed in order by flowables and then emulsifiable concentrates, including Tenn-Cop 5E. Spreaders, stickers, nutrients, etc. should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank or contact your chemical supplier. Observe all precautions and limitations on the labels of all products used in mixtures.

CROP CLASSIFICATION

FIELD CROPS: Corn (Field), Peanut and Sugar Beet.

SMALL FRUITS: Blackberry, Boysenberry, Dewberry, Loganberry, Raspberry and Strawberry.

TREE CROPS: Apple, Avocado, Cherry (Sour), Citrus, Mango, Nectarine, Olive, Peach, Pecan, Walnut.

VEGETABLES: Bean, Beet, Broccoli, Brussels Sprout, Cabbage, Cantaloupe, Carrot, Cauliflower, Celery, Cucumber, Lettuce, Muskmelon, Onion/Garlic, Pea, Pepper, Potato, Pumpkin, Spinach, Squash, Tomato and Watermelon.

VINES: Grape.

GREENHOUSE AND SHADEHOUSE CROPS: Tenn-Cop 5E may be used in greenhouses and shadehouses to control diseases on any crop on this label where physiology allows greenhouse or shadehouse culture.

ORNAMENTALS: Species as listed.

Minimum Recommended Spray Volume (Gallons Per Acre)
When Applying Tenn-Cop 5E

	Aerial	Ground	
		Dilute	Concentrate
Citrus	10	800	100*
Field Crops	3	20	---
Ornamentals	10	100	50
Small Fruits	5	150	50
Tree Crops	10	400	50
Vegetables	3	20	---
Vines	5	150	50

* Pesticide application equipment such as Curtec® or other similar sprayers which are capable of obtaining thorough coverage at low volumes may be used at as low as 20 gpa of spray volume.

The following specific instructions are based on general application procedures. The recommendations of the State Agricultural Extension Service should be closely followed as to timing, frequency and number of sprays per season.

~~**MIXING INSTRUCTIONS**~~

~~Pour Tenn-Cop 5E into spray tank at least ½ filled with water with adequate agitation. When mixed with other products proven or known to be compatible, wettable powders should be added first, followed in order by flowables and then emulsifiable concentrates, including Tenn-Cop 5E.~~

~~**TANK MIX INFORMATION**~~

~~Tenn-Cop 5E can be used in tank mix with the products specified in the table below for use on the crops shown to enhance control of diseases for which the products are labeled. The products should be used as labeled in regard to dosage, timing, maximum number of applications and preharvest interval. The tank mix should be used in accordance with the most restrictive of any label's limitations and precautions. No label dosage rates should be exceeded. Tenn-Cop 5E may be applied up to day of harvest. When tank mixed with other products, do not apply the mixture closer to harvest than stated on the product label. Tenn-Cop 5E cannot be mixed with any product bearing a label prohibition against such mixing.~~

~~**NOTE:** Bravo = Daconil 2787; Dithane M - 45 = Fore, Protect T/O.~~

~~Do not mix Tenn-Cop 5E with products containing diazinon, thiophanate-methyl, or fosetyl-al.~~

~~**CROP TANK MIX PRODUCTS***~~

~~Apple ——— Dithane M-45, Maneb 80WP, Manzate 200, Polyram 80WP~~

~~Celery ——— Bravo 500, Bravo 720, Bravo W-75~~

~~Peanut ——— Bravo 720, Dithane F-45, Dithane M-45, Topsin M 70W~~

~~Tomato ——— Bravo 500, Bravo 720, Bravo W-75, Dithane M-45, Maneb 80WP, Manzate 200~~

~~*Products which are equivalents of the specified products and labeled for the use can be substituted.~~

~~Do not apply this product through any irrigation (chemigation) system using aluminum parts or components as damage to the system may occur. Such application is prohibited regardless of whether the irrigation system is flushed with water after use of this product.~~

~~Apply this product only through one or more of the following types of systems: sprinkler, including center pivot, lateral move, traveler, big gun, plastic pipe solid set system(s) which contain no aluminum parts or components. Do not apply this product through any other type of irrigation system.~~

~~COMPATIBILITY INFORMATION~~

~~Tenn-Cop 5E includes compatibility with Bravo (WP, 500, 720), Captan, Daconil 2787, Ferbam, Maneb (WP or Flowable), Dithane M-45 and Manzate 200, Sulfur (wettable or flowable), organophosphates. Thiodan, Bacillus thuringiensis Berliner, Guthion, Diazinon, and Malathion. Do not mix Tenn-Cop 5E with oil when applied to citrus. Do not mix Tenn-Cop 5E with chelated or liquid fertilizers. Use product with other fungicides and insecticides with caution. Observe all cautions and limitations on all products used in mixtures.~~

~~Tenn-Cop 5E should be used in sufficient water to provide thorough coverage unless specific dilutions and spray volumes have been provided in the specific crop directions.~~

FIELD CROPS

Crop	Disease	Rate/Acre	Use Instructions
Corn (Field)	Southern Leaf Blight (North Central States only)	3 pts. ~~(acre)~~	Apply at first sign of disease. Repeat at 10 to 20 day intervals or as needed until corn is mature.
Peanuts	Sclerotinia Blight, Stem Rot (suppression)	8-18 pts. (broadcast) 3-6 pts ~~(acre)~~	Apply at emergence, tea cup size and first bloom which are generally 10 to 14 day intervals. ~~Highest rate~~

		(18-inch band)	~~suggested for severe disease history~~ Use the high rate in fields with a history of severe disease. For most effective control, continue with the leaf spot spray program which follows.
	Leaf Spot, ~~and~~ Web Blotch	3-4 pts. ~~(acre)~~	Apply at first sign of disease, usually 25 to 40 days after emergence. Repeat at 7 to 10 day intervals or as needed up to day of harvest. In tank mixes, apply 1½ pints of Tenn-Cop 5E plus 1 pint of ~~Bravo~~ Equus 720 or 2 to 3 pints of Tenn-Cop 5E with the recommended rate of other recommended, compatible fungicides. ~~plus any of the other products specified for peanuts. See "TANK MIX INFORMATION."~~ If Sclerotinia is a problem, make first application 10 to 14 days after the last Sclerotinia spray ~~applied at first bloom~~ and continue until harvest. Use higher rates of Tenn-Cop 5E in leaf spot sprays when leaf spot is heavy or when ~~or where~~ Sclerotinia blight and stem rot infection is expected to be heavy. When above treatments are applied through an overhead sprinkler, be sure that good coverage is achieved. ~~with your sprinkler. Also Read and follow special use directions elsewhere on this label when applying by sprinkler irrigation.~~
Sugar Beet	Cercospora Leaf Spot, Powdery Mildew	3 pts. ~~(acre)~~	Apply at first sign of disease. Tenn-Cop 5E can be mixed with 2 pounds of sulfur (wettable or flowable) per acre. Repeat applications of Tenn-Cop 5E alone every 7 days or the Tenn-Cop 5E-sulfur tank mix every 10 to 14 days, depending on disease pressure.

~~When above treatments are applied through an overhead sprinkler, be sure that good coverage is achieved with your sprinkler. Also Read and follow special use directions elsewhere on this label when applying by sprinkler irrigation.~~

SMALL FRUITS

Crop	Disease	Rate/Acre	Use Instructions
~~Berry~~ (Blackberry, Boysenberry, Dewberry, Loganberry, Raspberry)	Anthracnose, Cane Spot, Leaf Spot, Yellow Rust	4-6 pts.	Apply when leaf buds begin to open. Repeat when flower buds show white and continue at 10 to 14 day intervals or as needed until harvest. Also make a post-harvest spray after pruning but before fall rains using 4 quarts per 100 gallons.
Strawberry	Leaf Spot, Scorch	3-4 pts.	Apply beginning when new growth starts and repeat at 7 to 10 day intervals or as needed until harvest.

TREE CROPS
~~FRUITS AND NUTS~~

Crop	Disease	Rate	Use Instructions
Apple	Fire Blight	2½-3 pts. per 100 gal. (spray volume)	Tank mix Tenn-Cop 5E with recommended rates of Manzate 75DF or other recommended, compatible fungicide. ~~Dithane M-45, Manzate 200, Maneb 80WP, Polyram 80WP or equivalent in other formulations of these products. (NOTE: The quantity of each formulation must be calculated based on the contained active ingredient.)~~ Spray at silver tip and bud break and repeat on 3 to 5 day intervals or as needed up to petal fall. Use the lower rate if disease pressure is light and higher rate when conditions

			favor ~~heavy~~ disease ~~pressure~~ development. **NOTE:** Tenn-Cop 5E ~~as used in this recommendation~~ may cause severe russeting of Golden Delicious and similar susceptible apple varieties. ~~Mild russeting of these varieties may occur when used on bearing trees.~~ Preferred use is on non-bearing trees or on processing varieties where ~~russeting~~ fruit finish is not a ~~problem~~ concern. Treatment after leaves emerge may cause limited defoliation of young leaves.
Avocado	Anthracnose, Blotch (Cercospora Leaf Spot)	6 qts./acre	Apply when bloom buds begin to swell. Repeat monthly until September.
~~Berry (Blackberry, Boysenberry, Dewberry, Loganberry, Raspberry)~~	~~Anthracnose, Leaf and Cane Spots, Yellow Rust~~	~~4-6 pts. (acre)~~	~~Apply when leaf buds begin to open. Repeat when flower buds show white and continue at 10 to 14 intervals until harvest. Also make a post-harvest spray after pruning but before fall rains using 4 quarts per 100 gallons.~~
Cherry (Sour)	Bacterial Canker (Pseudomonas syringae), Leaf Spot	3 pts./100 gal. (spray volume)	Apply in spring as buds begin to swell. Repeat at bud burst and weekly thereafter or as needed for up to 6 sprays. In fall apply a spray at both 10% and 80% leaf fall. ~~CAUTION~~ **NOTE:** Sprays after leaf emergence may cause some ~~leaf~~ defoliation.
	Brown Rot Blossom Blight	3 ~~Tbsp~~ pts. /100 gal. (spray volume)	Apply at popcorn ~~bud~~, full bloom and at petal fall. During wet weather additional bloom sprays may be necessary.
Citrus	Melanose	1⅛ -1½ gal. in	~~Apply by aircraft.~~

		10 gal. water (Aerial) 3 qts./500 gal. water (Ground)	Apply 1 to 3 weeks after petal fall and repeat 4 weeks later. **NOTE:** Do not apply with ~~any~~ oil ~~on any oil~~ as some defoliation may occur.
	Red Algae	1½ gal. in 500 gal. water	Apply in spring as a preventative spray. Repeat in late summer to control new algae colonies. **NOTE:** Do not apply with ~~any~~ oil as some defoliation may occur.
~~Grapes~~	~~Black Rot (suppression), Downy Mildew, Powdery Mildew~~	~~1½-4½ pts. (acre)~~	~~For dilute spray, mix 1½ pints Tenn-Cop 5E per 100 gallons of water, or for concentrate sprays mix 3 to 4½ pints Tenn-Cop 5E in 20 to 250 gallons of water and apply to 1 acre. Begin spray when new growth is ½ inch long. Repeat every 7 to 10 days throughout growing season.~~ ~~**NOTE:** Do not mix with lime. Certain varieties and hybrids may be slightly sensitive to copper sprays, resulting in marginal leaf burn.~~
Mangoes	Anthracnose	6 qts./acre	~~Apply weekly~~ Beginning when panicles are 2 inches long, apply **weekly** until fruit are set. ~~Repeat~~ Make additional applications monthly through September.
Olive	Olive Leaf Spot (Peacock Spot)	6-9 qts./acre	Apply before fall rains begin. Make a second application in late winter or early spring before bud swell if disease is severe.
Peaches, Nectarines	Blossom Brown Rot, Leaf Curl, Shot Hole	6-9 qts./acre	Apply at leaf fall and repeat in late dormant up to bud swell and at pink bud. May be mixed and used with dormant spray oil. Do not apply after full bloom.

	Bacterial Spot	3 pts./100 gal. water	Apply at late dormant but no later than late bud swell.
		¼ pt./100 gal. water	Apply as a post-bloom cover spray. Do not make more than 6 applications. **NOTE:** Slight defoliation and spotting of leaves may occur.
Pecan	Phytophthora Blight (Shuck Rot, ~~and~~ Kernel Rot), Zonate Leaf Spot (suppression)	3-5 pts./acre	Begin application when nuts begin to form and repeat at 10 to 21 day intervals or as needed through September. Use higher rate and narrower intervals during wet periods.
~~Strawberry~~	~~Leaf Spot, Scorch~~	~~3-4 pts. (acre)~~	~~Apply beginning when new growth starts and repeat at 7 to 10 day intervals until harvest.~~
Walnuts	Bacterial Blight	2½ gal./500 gal. water per acre	Apply beginning when leaflets start to unfold and before 1% pistillate blooms. Repeat weekly or as needed, especially during rainy periods. Four pints per 100 gallons of water is equal to 2½ gallons in 500 gallons of water per acre.

VEGETABLES

Crop	**Disease**	**Rate/Acre**	**Use Instructions**
Beans (Green, ~~Snap,~~ Dry ~~Colored, Navy~~)	Bacterial Blight	3 pts. ~~(acre)~~	Apply by air, ground or sprinkler irrigation equipment beginning at trifoliate and continue at 7 to 10 day intervals or as needed up to day of harvest. Use 7 day intervals during wet weather. ~~When applying by sprinkler irrigation, also read and follow special use directions elsewhere on this label.~~
Beets (Red	Cercospora Leaf	3 pts. ~~(acre)~~	Apply at first sign of disease.

Table)	Spot		Repeat at 7 to 10 day intervals or as needed up to day of harvest.
Broccoli, Brussels Sprout, Cauliflower	Alternaria Blight, Downy Mildew	¾ pts. ~~(acre)~~	Apply beginning when disease is expected and repeat at 7 to 10 day intervals or as needed. ~~CAUTION~~ **NOTE:** A slight reddening of older leaves may occur, especially in late fall. Do not spray when plants are under environmentally stressful conditions. Do not add spreader-stickers to spray.
Cabbage	Alternaria Blight, Downy Mildew	1½ pts. ~~(acre)~~	Apply beginning when disease is expected and repeat at 7 to 10 day intervals or as needed. ~~CAUTION~~ **NOTE:** A slight reddening of older leaves may occur, especially in late fall. Do not spray when plants are under environmentally stressful conditions. Do not add spreader-stickers to spray.
Carrots	Early Blight, Late Blight, Leaf Spot	3-4½ pts. ~~(acre)~~	Apply two weeks before disease usually appears. Repeat at 7 to 10 day intervals or as needed up to day of harvest.
Celery	Bacterial Blight, Early Blight	3 pts. ~~(acre)~~	Apply at first sign of disease. Repeat at 7 to 10 day intervals or as needed up to day of harvest. If disease pressure is heavy, use 3 pints tank mixed with recommended rates of ~~Bravo 500, 720, W-75~~ Equus 720 or other recommended, compatible fungicide.
Cucurbits (Cantaloupe, Cucumbers,	Alternaria Blight, Angular Leaf Spot, ~~(Cucumber only)~~	3 pts. ~~(acre)~~	Apply 2 weeks before disease normally appears. Repeat at 7 to 10 day intervals or as needed up to day

Muskmelon, Pumpkins, Squash, ~~and~~ Watermelons)	Downy Mildew, Powdery Mildew, Scab,		of harvest.
Lettuce	Downy Mildew	1½-3 pts. ~~(acre)~~	Apply at first sign of disease. Repeat at 7 to 10 day intervals or as needed up to day of harvest. Full season use of the 3 pint rate may result in some yellowing of leaf margins on some varieties. Use lower rate when disease pressure is low or on copper sensitive varieties of iceberg head lettuce.
	Bacterial Soft Rot, Bottom Rot (Hawaii only)	3 pts. ~~(acre)~~	Apply at first sign of disease. Repeat at 7 to 10 day intervals or as needed up to day of harvest.
Onion, Garlic	Bacterial Soft Rot, Downy Mildew, Gray Mold, Neck Rot	3 pts. ~~(acre)~~	Apply at first sign of disease ~~repeat~~ or when conditions favor disease. Repeat every 7 days or as needed up to day of harvest. ~~When applied by sprinkler irrigation, read and follow special use directions on this label.~~
Peas	Bacterial Blight, Powdery Mildew	3-4 pts. ~~(acre)~~	Apply at first sign of disease ~~repeat~~ or when conditions favor disease development. Repeat every 7 days up to day of harvest.
Peppers~~*~~	Bacterial Spot, Cercospora Leaf Spot	3-4½ pts. ~~(acre)~~	Apply 2 weeks before disease normally appears. Repeat at 7 to 10 day intervals up to day of harvest. Control of bacterial spot may be enhanced by adding the recommended rate of Manzate 75DF or other recommended, compatible fungicides to the tank mix.
Potatoes	Early Blight, Late Blight,	3 pts. ~~(acre)~~	Apply beginning when weather conditions favor disease development and repeat every 7 days or as needed up to day of harvest.

			~~When applied by sprinkler irrigation, read and follow special use directions on this label~~.
Spinach	Anthracnose, Cercospora Leaf Spot, Downy Mildew,	3-4 pts. ~~(acre)~~	Apply 2 weeks before disease normally appears. Repeat at 7 to 10 day intervals or as needed up to day of harvest.
Tomatoes~~*~~	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Septoria Leaf Spot	3 pts. ~~(acre)~~	Apply at first sign of disease. Repeat at 7 to 10 day intervals or as needed up to day of harvest. ~~When applied by irrigation, read and follow special use directions listed elsewhere on this label~~. Control of bacterial speck and bacterial spot may be enhanced by adding the recommended rate of Manzate 75DF or other recommended, compatible fungicides ~~Maneb 80WP, Dithane M-45 or Manzate 200 at recommended rates~~ to the tank mix. ~~If anthracnose is also a problem, add Maneb 80WP, Dithane M-45, Manzate 200 or Bravo 500, 720 or W-75 at recommended rates with Tenn-Cop 5E in the tank mix. Where anthracnose is not an important problem, bacterial speck and spot, early blight and septoria can be controlled with a tank mix of Tenn-Cop 5E at 3 pints and recommended rates of Bravo 500, 720, or W-75 per 1 acre. Apply by overhead irrigation with only those fungicides with Tenn-Cop 5E that are specifically labeled by its manufacturer for irrigation applications.~~

~~* For control of disease on these crops in home greenhouses, gardens and garden plant beds.~~

VINES

Crop	Disease	Rate/Acre	Use Instructions
Grape	Black Rot (suppression), Downy Mildew, Powdery Mildew	1½ -4½ pts.	For dilute spray, mix 1½ pints Tenn-Cop 5E per 100 gallons of water, or for concentrate sprays mix 3 to 4½ pints in 20 to 250 gallons of water and apply to 1 acre. Begin applications when new growth is ½ inch long. Repeat every 7 to 10 days or as needed throughout the growing season. NOTE: Do not mix with lime. Certain varieties and hybrids may be slightly sensitive to copper sprays, resulting in marginal leaf burn.

GREENHOUSE AND SHADEHOUSE CROPS

Notice to User: Tenn-Cop 5E may be used in greenhouses and shadehouses to control diseases on crops which appear on this label. The grower should bear in mind that the sensitivity of crops grown in greenhouses and shadehouses differs greatly from crops grown under field conditions. Neither the manufacturer nor seller has determined whether or not Tenn-Cop 5E can be used safely on all greenhouse and shadehouse grown crops. The user should determine if Tenn-Cop 5E can be used safely prior to commercial use. In a small area, apply the recommended rates to the plants in question, i.e., foliage, fruit, etc., and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use.

Apply Tenn-Cop 5E according to specific rates given for those crops elsewhere on this label. One tablespoon of Tenn-Cop 5E per gallon is equivalent to 3 pints per 100 gallons. **One tablespoon per 1,000 square feet is equivalent to one pint per acre.** Tenn-Cop 5E should be applied in adequate water for thorough coverage of plant parts. Begin application at first sign of disease and repeat at 7 to 14 day intervals or as needed; use shorter interval during periods when severe disease conditions persists.

~~ORNAMENTALS~~

~~Apply at first sign of disease. Repeat at 7 to 10 day intervals as needed. Use higher rates or shorter intervals when disease pressure is high. Spray foliage and stems to run-off.~~

~~One tablespoon of Tenn-Cop 5E per gallon of water equals 3 pints Tenn-Cop 5E per 100 gallons of water.~~

Plant	Pest	Rate/Gal. Water	Remarks
Azaleas*	Cercospora Leaf Spot, Botrytis Blight, Leaf Gall, Phytophthora Dieback, Powdery Mildew	3-5 tsp.	
Begonias	Xanthomonas Leaf Spot, Anthracnose, Powdery Mildew	3-5 tsp.	
Camellias	Phytophthora Dieback	3-5 tsp.	
Chrysanthemum, Gardenia, Philodendron*	Bacterial Blight	3-5 tsp.	
Cotoneaster	Botrytis Blight	3-5 tsp.	
Hydrangeas	Leaf Spots, Powdery Mildew	3-5 tsp.	
Ixora, Magnolias, Palms	Leaf Spots	3-5 tsp.	
Iris*	Scab	3-5 tsp.	
Ivy	Bacterial Leaf Spot, Xanthomonas Leaf Spot	3-5 tsp.	
Pachysandra	Volutella Blight	3-5 tsp.	
Pyracantha	Fire Blight, Scab	3-5 tsp.	Begin spray during bloom period. Repeat at 3 to 4 day intervals. After bloom period continue at 7 to 10 day intervals.
Roses*	Powdery Mildew,	3-5 tsp.	

	Black Spot (suppression)		
Pine (Austrian, Ponderosa, Mugo, Scotch)	Dothistroma Needle Blight	3 tsp./Gal. (3 pts/100 gal.)	Apply to run-off beginning as new needles emerge from needle sheaths. Repeat 3-4 weeks later.
	Diplodia Tip Blight	3 tsp. (3 pts./100 gal.)	Make first application when shoot buds open. Repeat weekly until needles break through needle sheaths.
Juniper	Cercospora Needle Blight	3 tsp./Gal. (3 pts./100 gal.)	Make first application as new growth begins. Repeat monthly making at least 2 to 3 sprays.
Maple, Oak, Sycamore	Anthracnose, Leaf Spots	3 tsp./Gal. (3 pts./100 gal.)	Make first application just before bud swell. Repeat at 7 day intervals as needed. Make at least 3 sprays.
Cedar	Cedar Apple Rust	3 tsp./Gal. (3 pts./100 gal.)	Apply weekly in July and August.

* Discoloration of blooms may occur on certain varieties or colors of these plants. To avoid this problem, do not spray just before or during flower period.

ORNAMENTALS

Use Tenn-Cop 5E for control of bacterial and fungal diseases of foliage, flowers and stems on ornamentals in greenhouses, shadehouses, outdoor nurseries and outdoor landscape plantings.

For ornamental plants, apply as a thorough cover spray using of 3 pints of Tenn-Cop 5E in 100 gallons of water. Spray foliage and stems to run-off. For application to small areas, use one tablespoon of Tenn-Cop 5E per gallon of water. **One tablespoon of Tenn-Cop 5E per gallon is equivalent to 3 pints per 100 gallons of water.** Begin application at first sign of disease and repeat at 7 to 14 day intervals or as needed; use shorter interval during periods of frequent rains or when severe disease conditions persist.

Tenn-Cop 5E may be used alone or in combination with other fungicides registered for use on ornamentals as a maintenance spray. Use in accordance with the most restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

Notice to User: Plant sensitivities to Tenn-Cop 5E have been found to be acceptable for the specific genera and species listed on this label under the conditions tested. However, phytotoxicity may occur. Due to the large number of species and varieties of ornamental and nursery plants, and the wide range of growing conditions, it is impossible to test every one for sensitivity to Tenn-Cop 5E. Neither the manufacturer nor seller has determined whether or not Tenn-Cop 5E can be safely used on ornamental or nursery plants not listed on this label. The user should determine if Tenn-Cop 5E can be used safely prior to commercial use. In a small area, apply the recommended rates to the plants in question, i.e. bedding plants, foliage, etc., and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use.

NOTE: This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.

Crop	Scientific Name	Disease
Aglaonema	*Aglaonema* spp.	Bacterial Leaf Spot
Althea (Rose of Sharon)	*Hibiscus syriacus*	Bacterial Leaf Spot
Andromeda, Japanese	*Pieris japonica*	Leaf Spots, Twig Blight
Aralia	*Dizygotheca elegantissima*	Alternaria, Cercospora Leaf Spot, Xanthomonas Leaf Spot,
Arborvitae	*Thuja* spp.	Alternaria Twig Blight, Cercospora Leaf Blight
Aster	*Aster* spp.	Downy Mildew, Leaf Spots
Azalea 1/	*Rhododendron* spp.	Botrytis Blight, Cercospora Leaf Spot, Phytophthora Dieback, Powdery Mildew
Beech	*Fagus* spp.	Leaf Spots
Begonia	*Begonia semperflorens*	Anthracnose,

		Bacterial Leaf Spot (*Xanthomonas* spp., *Erwinia* spp., *Pseudomonas* spp.) Powdery Mildew
Bougainvillea	*Bougainvillea spectabilis*	Anthracnose, Bacterial Leaf Spot
Boxwood	*Buxus* spp.	Leaf Spots
Camellia	*Camellia japonica, C. sasanqua*	Anthracnose, Bacterial Leaf Spot, Phytophthora Dieback
Camphor Tree	*Cinnamomum camphora*	Pseudomonas Leaf Spot
Canna	*Canna* spp.	Pseudomonas Leaf Spot
Carnation 1/	*Dianthus* spp.	Alternaria Blight, Botrytis Blight, Pseudomonas Leaf Spot
Cedar	*Cedrus* spp.	Tip Blight
Chinese Tallow Tree	*Sapium sebiferum*	Bacterial Leaf Spot (*Xanthomonas* spp., *Pseudomonas* spp.)
Chrysanthemum 1/	*Chrysanthemum morifolium*	Bacterial Blight, Botrytis Blight, Pseudomonas Leaf Spot, Septoria Leaf Spot
Cotoneaster	*Cotoneaster* spp.	Botrytis Blight
Crabapple	*Malus* spp.	Fire Blight
Cypress	*Cupressus* spp.	Twig Blight
Dahlia	Dahlia pinnata	Alternaria Leaf Spot, Botrytis Gray Mold, Cercospora Leaf Spot
Delphinium	*Delphinium* spp.	Leaf Spots

Dianthus	*Dianthus* spp.	Bacterial Soft Rot, Bacterial Spot
Dogwood	*Cornus florida*	Anthracnose
Douglas Fir	*Pseudotsuga menziesii*	Rhabdocline Needlecast
Dracaena	*Dracaena marginata*	Bacterial Leaf Spot
Dumb Cane	*Dieffenbachia* spp.	Bacterial Leaf Spot
Dusty Miller	*Senecio cineraria*	Bacterial Leaf Spot (*Pseudomonas cichorii*)
Echinacea	*Echinacea* spp.	Bacterial Leaf Spot (*Pseudomonas cichorii*)
Elm, Chinese	*Ulmus parvifolia*	Xanthomonas Leaf Spot
Euonymus	*Euonymus* spp.	Botrytis Blight, Anthracnose
Fern, Boston	*Nephrolepis exaltata*	Bacterial Leaf Spot
Fern, Holly	*Cyrtomium falcatum*	Pseudomonas Leaf Spot
Fig, Weeping	*Ficus benjamina*	Bacterial Leaf Spot
Filbert (Ornamental)	*Corylus* spp.	Filbert Blight
Gardenia	*Gardenia jasminoides*	Alternaria Leaf Spot, Bacterial Blight, Botrytis Bud Rot, Cercospora Leaf Spot
Geranium	*Pelargonium* spp.	Alternaria Leaf Spot, Botrytis Gray Mold, Cercospora Leaf Spot
Gladiola	*Gladiolus* spp.	Alternaria Leaf Spot, Anthracnose, Bacterial Leaf Blight, Botrytis Gray Mold
Golden Rain Tree	*Koelreuteria paniculata*	Bacterial Leaf Spot

Grape Ivy	*Cissus* spp.	Bacterial Leaf Spot
Hawthorn	*Crataegus* spp.	Fire Blight
Hibiscus 4/	*Hibiscus* spp.	Bacterial Leaf Spot
Holly	*Ilex* spp.	Bacterial Blight, Leaf Spots
Honeylocust	*Gleditsia triacanthos*	Bacterial Leaf Spot
Hydrangea	*Hydrangea* spp.	Leaf Spots, Powdery Mildew
Impatiens	*Impatiens sallerana*	Bacterial Leaf Spot
Indian Hawthorn 5/	*Raphiolepis indica*	Anthracnose, Entomosporium Leaf Spot
Iris 6/	*Iris* spp.	Bacterial Leaf Spot
Ivy (English, Algerian) 1/	*Hedera helix, H. canariensis*	Xanthomonas Leaf Spot
Ixora	*Ixora coccinea*	Leaf Spots
Juniper	*Juniperus* spp.	Anthracnose, Cedar Apple Rust, Cercospora Needle Blight, Twig Blight
Lantana	*Lantana camera*	Bacterial Leaf Spot
Leyland Cypress	*X Cupressocyparis leylandii*	Cercospera Needle Blight
Lilac	*Syringa* spp.	Cercospora Leaf Spot
Lily, Easter 2/	*Lilium longiflorum*	Botrytis Blight
Linden	*Tilia* spp.	Anthracnose, Leaf Blight
Loblolly Bay	*Gordonia lasianthus*	Anthracnose

Loquat	*Eriobotrya japonica*	*Colletotrichum* spp., Entomosporium maculata
Magnolia	*Magnolia* spp.	Algal Leaf Spot, Anthracnose, Bacterial Leaf Spot
Mandevilla	*Mandevilla* spp.	Anthracnose
Maple	*Acer* spp.	Anthracnose, Leaf Spots, Pseudomonas Leaf Blight
Marigold	*Tagetes* spp.	Alternaria Leaf Spot, Botrytis Leaf Rot, Cercospora Leaf Spot, Flower Rot
Mountain-Ash	*Sorbus* spp.	Fire Blight
Mulberry (Ornamental)	*Morus* spp.	Bacterial Leaf Spot
Narcissus	*Narcissus* spp.	Leaf Blight
Nephthytis	*Syngonium podophyllum*	Bacterial Leaf Spot
Oak	*Quercus* spp.	Anthracnose, Leaf Spots
Oak, Laurel	*Quercus laurifolia*	Algal Leaf Spot (*Cephaleuros virescens*)
Oleander	*Nerium oleander*	Bacterial Leaf Spot, Fungal Leaf Spot
Oregon Grapeholly	*Mahonia acquifolium*	Leaf Spots
Pachysandra	*Pachysandra procumbens*	Volutella Leaf Blight
Palm, Date	*Phoenix canariensis*	Pestalotia Leaf Spot
Palm, European Fan	*Chamaerops humilis*	Pestalotia Leaf Spot
Palm, Parlor	*Chamaedorea elegans*	Bacterial Leaf Spot

Palm, Queen	*Arecastrum romanzoffianum*	Exosporium Leaf Spot, Phytophthora Bud Rot
Palm, Washingtonia	*Washingtonia robusta*	Pestalotia Leaf Spot
Peach (Flowering) 3/	*Prunus* spp.	Fire Blight, Bacterial Blast, Brown Rot
Pear (Flowering)	*Pyrus calleryana*	Fire Blight, Leaf Spot
Pentas (Egyptian Star)	*Pentas* spp.	Bacterial Leaf Spot (*Xanthomonas* spp.)
Peony	*Paeonia* spp.	Botrytis Blight
Periwinkle	*Catharanthus roseus*, *Vinca* spp.	Phomopsis Stem Blight
Philodendron	*Philodendron selloum*	Bacterial Blight, Bacterial Leaf Spot
Phlox	*Phlox* spp.	Alternaria Leaf Spot
Photinia (Red Tip)	*Photinia x fraseri*, *P. glabra*	Anthracnose, Entomosporium Leaf Spot
Pine	*Pinus* spp.	Diplodia Tip Blight, Dothistroma Needle Blight
Pistachio	*Pistacia chinensis*	Anthracnose
Plantain Lily 6/	*Hosta* spp.	Bacterial Leaf Spot
Plum (Flowering) 3/	*Prunus* spp.	Bacterial Blast, Brown Rot, Fire Blight
Poinsettia	*Euphorbia pulcherrima*	Botrytis Blight, Powdery Mildew
Pothos	*Scindapsus* spp.	Bacterial Leaf Spot
Powder Puff Plant	*Calliandra* spp.	Bacterial Leaf Spot

Pyracantha	*Pyracantha* spp.	Fire Blight, Scab
Rhododendron	*Rhododendron* spp.	Alternaria Flower Spot
Rose 1/	*Rosa* spp.	Black Spot, Powdery Mildew
Snapdragon	*Antirrhinum majus*	Anthracnose, Dieback, Downy Mildew
Spathe Flower	*Spathiphyllum* spp.	Bacterial Leaf Spot
Spirea	*Spiraea* spp.	Fire Blight
Spruce	*Picea* spp.	Needle Casts
Sycamore	*Plantanus occidentalis*	Anthracnose, Leaf Spots
Tatarian Honeysuckle	*Lonicera tatarica*	Bacterial Leaf Spot
Tulip	*Tulipa* spp.	Anthracnose, Botrytis Blight
Umbrella Tree	*Schefflera* spp.	Bacterial Leaf Spot
Verbena	*Verbena* spp.	Xanthomonas Leaf Spot
Viburnum	*Viburnum odoratissimum, V. plicatum, V. suspensum*	Anthracnose
Viola (Pansy, Violet)	*Viola* spp.	Downy Mildew
Willow	*Salix* spp.	Anthracnose
Yew	*Taxus* spp.	Needle Blight
Yucca (Adam's Needle)	*Yucca* spp.	Cercospora Leaf Spot, Septoria Leaf Spot
Zinnia	*Zinnia* spp.	Leaf Spots

1/ Discoloration of blooms may occur on certain varieties or colors of these plants. To avoid this problem, do not spray just before or during flower period.

2/ Apply Tenn-Cop 5E at 5 to 6 pints per 100 gallons of water.

3/ Apply dormant through bloom only.

4/ Hibiscus - Do not apply to plants in flower.

5/ For Indian Hawthorn use 4 to 5 pints per 100 gallons of water.

6/ Some cultivars may be sensitive to Tenn-Cop 5E.

NOTE: Phytotoxicity may depend on varietal differences. If unfamiliar with the use of Tenn-Cop 5E, apply the recommended rate to a few plants and observe after 7 to 10 days for symptoms of phytotoxicity.

GENERAL CHEMIGATION INSTRUCTIONS

Do not apply this product through any irrigation (chemigation) system using aluminum parts or components as damage to the system may occur. Such application is prohibited regardless of whether the irrigation system is flushed with water after use of this product.

~~Apply this product only through center pivot, lateral move, end tow, side (wheel) roll, solid set or hand move sprinkler irrigation systems.~~ Apply this product only through one or more of the following types of systems: sprinkler, including center pivot, lateral move, traveler, big gun, or plastic pipe solid set system(s) which contain no aluminum parts or components. Do not apply this product through any other type of irrigation system.

~~Do not apply this product with any sprinkler irrigation system connected directly to a public water 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 specialists, equipment manufacturers 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 systems are in place.

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.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

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 system should be discharged into the 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 or 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 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, or in cases where there is no water pump, 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.

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

NOTE: It must be determined if proper application equipment is available and if waste associated with its use can be properly handled. Agricultural chemicals are often reactive with the materials used in the construction of application equipment such as aluminum, rubber and synthetic materials. This factor should be taken into consideration when selecting proper application equipment. It is necessary that all application equipment be thoroughly flushed with clean water after each day's use.

When mixing, fill nurse tank half full with water. Add Tenn-Cop 5E slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. When mixing with other products, wettable powders should be added first, followed in order by flowables and

then emulsifiable concentrates, including Tenn-Cop 5E. Stickers, spreaders, nutrients, etc. should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe all precautions and limitations on the labels of all products used in mixtures. Agitation of the mixture in the nurse tank is recommended.

Tenn-Cop 5E should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Shut off injection equipment after treatment and continue to operate irrigation system until Tenn-Cop 5E has been cleared from the last sprinkler head.

SPRINKLER CHEMIGATION

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 also 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.

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

NOTE: It must be determined if proper application equipment is available and if waste associated with its use can be properly handled. Agricultural chemicals are often reactive with the materials used in the construction of application equipment such as aluminum, rubber and synthetic materials. This factor should be taken into consideration when selecting proper application equipment. It is necessary that all application equipment be thoroughly flushed with clean water after each day's use.

When mixing, fill nurse tank half full with water. Add Tenn-Cop 5E slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. When mixing with other products, wettable powders should be added first, followed in order by flowables and then emulsifiable concentrates, including Tenn-Cop 5E. Stickers, spreaders, nutrients, etc. should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe all precautions and limitations on the labels of all products used in mixtures. Agitation of the mixture in the nurse tank is recommended.

Tenn-Cop 5E should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Shut off injection equipment after treatment and continue to operate irrigation system until Tenn-Cop 5E has been cleared from the last sprinkler head.

SPECIAL USE DIRECTIONS FOR SPRINKLER APPLICATION OF TENN-COP 5E

To apply Tenn-Cop 5E and/or tank mixes with it through a sprinkler irrigation system, ~~on crops so labeled,~~ apply the recommended rate to each sprinkled acre. Any sprinkler irrigation system must give thorough, complete and uniform coverage for best disease control. Use irrigation and injection equipment that complies with label instructions above.

Depending on the type of injection equipment, Tenn-Cop 5E may be injected into the irrigation line either undiluted ~~into the irrigation lines~~ or ~~preferably it may be~~ diluted with water for easier metering. The preferred method is to dilute the required volume of Tenn-Cop 5E with an equal or greater volume of water in the supply tank. ~~If diluted, mix at least the same volume of water or more than the volume of Tenn-Cop 5E added to the tank.~~ When mixing, add water to the supply tank first. Then slowly add Tenn-Cop 5E to the tank while hydraulic or mechanical agitation is operating. ~~first with agitation to mix pesticide with the water, and add Tenn-Cop 5E to the water.~~ Use sufficient initial agitation to effect mixing, and continue agitation during application. If tank mixed with other compatible products, add them to the water with agitation by first adding wettable powders, flowables and then emulsifiable pesticides, including Tenn-Cop 5E. When Tenn-Cop 5E is used undiluted ~~with water in the injection tank~~, the supply tank must be free of any water residue and ~~make sure~~ no water should enters the tank until Tenn-Cop 5E has been completely emptied, as gelling may occur. ~~Should water enter tank, and product has gelled~~ If gelling occurs, add additional water so that ~~new added~~ the water volume at least equals the amount of Tenn-Cop 5E remaining and mix until gel returns to solution. If this dilution step is necessary, ~~re-adjust~~ recalibrate injection device to compensate for ~~this~~ the dilution.

Tenn-Cop 5E may be applied with up to 1.5 inches of irrigation water per acre. ~~in each irrigation. However,~~ To avoid runoff, do not exceed irrigation rates for your soil. ~~that causes runoff~~.

SOLID SET (Lateral move, end tow, side roll, solid set or hand move) - Calibration and Use

Measure the acreage covered by the sprinklers in each set. Operate the solid set irrigation system and injection equipment at normal pressures. Add the required amount of Tenn-Cop 5E for this acreage to the injection tank with dilution water as required so that flow rate of the injection equipment will inject contents of injection tank over a 10 to 20 minute period. Preferably inject Tenn-Cop 5E in the last 30 minutes of the solid set irrigation set. Continue irrigation after pesticide addition, giving sufficient time to completely flush all sprinkler lines.

For example: If a solid set sprinkles an area 1000 feet long and 65 feet wide per set, if Tenn-Cop 5E is to be applied at 3 pints/acre, and if the injection equipment is set to inject 5 gallons in a 20 minute period, then the following calculations demonstrate the above directions:

1. Acreage covered = $\frac{1000 \text{ feet} \times 65 \text{ feet}}{43{,}560 \text{ square feet/acre}} = 1.5 \text{ acres/set}$

2. Tenn-Cop 5E at 3 pints/acre - 3 pints x 1.5 acres = 4.5 pints/set.

3. Add 4.5 pints Tenn-Cop 5E to injection tank plus 35.5 pints water to give a 5 gallon dilution and injection on each solid set.

Center-Pivot (or other continuous moving systems) - Calibration and Use

Do not use in water driven units in which water spills on plants or soil.

Tenn-Cop 5E can be applied in up to 1.5 inches of water/acre/application assuming thorough uniform coverage of the sprinkler.
Determine the acreage to be irrigated in each circle or field to be treated. Determine the time in hours that will be required to cover the proposed treated area to apply the desired water. Add the required Tenn-Cop 5E to treat entire field to injection tank along with the needed volume of dilution water so that entire quantity of Tenn-Cop 5E will be applied to the field or acreage to be treated. Using adequate agitation and an injection device or proportional positive displacement metering pump adjust the flow rate per hour to inject the recommended rate of Tenn-Cop 5E per acre sprinkled.

For example: If Tenn-Cop 5E is to be applied at 3 pints/acre sprinkled, if sprinkler is applying 600 gallons per minute of irrigation water, and if each acre is to receive 1 inch of water (27,156 gallons), then the time to sprinkle 1 acre =

1. $\frac{27{,}156 \text{ (gallons 1 acre inch of water)}}{600 \text{ (gallons per minute pumped)}} = 45.25 \text{ minutes}$

2. If the proportional injection pump is set and calibrated to inject 2 gallons of water in

~~a 45.25 minute period, one would add 3 pints Tenn-Cop 5E plus 13 pints of diluting water to injection tank for each acre to be treated.~~

~~3. If sprinkler is set to cover 1 acre in a given time, inject the recommended per acre rate of Tenn-Cop 5E, or tank mix so labeled, plus any needed dilution water in that same time needed to cover 1 acre.~~

~~Consult State Agricultural Experiment Stations or State Agricultural Extension Service for additional information as the timing needs may vary with local conditions.~~

WARRANTY STATEMENT

GRIFFIN warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. 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 the manner of use or application, all of which are beyond the control of GRIFFIN. In no case shall GRIFFIN be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. The exclusive remedy of any buyer or user of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling, or application of this product, whether in contract, warranty, tort, negligence, strict liability, or otherwise, shall not exceed the purchase price paid for this product or at GRIFFIN'S election, the replacement of this product. GRIFFIN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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[Based on EPA stamped accepted label dated January 30, 1997]