

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

October 2, 2020

Niamh McMahon Product Regulatory Manager AMVAC Chemical Corporation 4695 MacArthur Court, Suite 1200 Newport Beach, CA 92660

Subject: Label Amendment – Voluntary use deletion to remove beans, cotton, garlic, peanuts, peppers, tomatoes as well as peppers and tomatoes as vegetable bedding plants from the label; other minor label updates including company address, warranty statement and addition of resistance management language

Product Name: Turfcide 4F

EPA Registration Number: 5481-8992

Application Date: 9/24/2020 Decision Number: 566484

Dear Ms. McMahon:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

This amendment supports the notification of use termination submitted by AMVAC Chemical Corporation to voluntarily amend the registration of Turfcide 4F to terminate the following uses:

Table 1			
EPA Registration Name and Use Deletion			
Number			
Turfcide 4F, EPA	beans, cotton, garlic, peanuts, peppers,		
registration # 5481-8992	tomatoes as well as peppers and tomatoes as		
	vegetable bedding plants		

In its letter to the Agency, AMVAC Chemical Corporation did not waive the 180-day comment period. The Notice of Request to Voluntary Amend Registrations to Terminate Certain Uses was published in the Federal Register [February 4, 2020 Federal Register Notice of Receipt of Requests; FRL-10004-11]. The comment period closed on August 3, 2020 and the Agency did not receive any public comment in response to this Notice, nor a written withdrawal of the use deletions from AMVAC Chemical Corporation. The final cancellation order to terminate uses was published in the Federal Register [August 25, 2020 Federal Register Cancellation Order for Certain Pesticide Registrations and Amendments To Terminate Uses; FRL-10013–65].

Pursuant to FIFRA section 6(f) (7 U.S.C. 136d(f), the Agency hereby approves the requested amendment to terminate uses of Turfcide 4F identified in Table 1 above. Accordingly, the Agency orders that the product registration identified in Table 1 above is hereby amended to terminate the affected uses. Any distribution, sale, or use of existing stocks of the subject product in a manner inconsistent with any of the provisions for disposition of existing stocks set forth below will be considered a violation of FIFRA.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. Existing stocks are those stocks of registered pesticide products which are currently in the United States and which were packaged, labeled, and released for shipment prior to the effective date of this action terminating uses. In accordance with the Order to Amend Pesticide Registrations to Terminate Uses published in the Federal Register on August 24, 2020, you may distribute or sell this product under the previously approved labeling until February 25, 2022. Persons other than the registrant may continue to sell and/or use existing stocks of products bearing old labeling until such stocks are exhausted, provided that such use is consistent with the terms of the previously approved labeling on, or that accompanied, the product with the terminated use. After February 25, 2022, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40

CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, you may contact Heather Garvie at 703-308-0034 or via email at garvie.heather@epa.gov.

Sincerely, Youther Myame

Heather A. Garvie, Acting Product Manager 21

Fungicide Branch (7505P) Office of Pesticide Programs

ACCEPTED

10/02/2020

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. FACA 2000

5481-8992

PENTACHLORONITROBENZENE GROUP 14 FUNGICIDE

Turfcide® 4F

[ABN Blocker 4F, Turfcide 400, Terraclor 400, Autilus]

FLOWABLE TURF, ORNAMENTAL, AND AGRICULTURAL CROP FUNGICIDE

ACTIVE INGREDIENT:	(% by weight)
Pentachloronitrobenzene (PCNB)	40.0%
INERT INGREDIENTS:	60.0%
TOTAL:	100.0%

Contains 4 lbs. of Pentachloronitrobenzene per U.S. gallon Contains petroleum distillates, xylene or xylene range aromatic solvents

KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

(11 you do	o not understand the label, find someone to explain it to you in detail.)
	FIRST AID
If in eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- J	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing
	eye.
	Call a poison control center or doctor for treatment advice.
If on skin or clothing:	Take off contaminated clothing.
g.	• Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
If Inhaled:	Move person to fresh air.
	• If person is not breathing, call 911 or an ambulance, and give artificial respiration,
	preferably mouth-to-mouth if possible.
	• Call a poison control center or doctor for further treatment advice.
If swallowed:	Immediately call a poison control center or doctor.
	• Do not induce vomiting unless told to do so by a poison control center or doctor.
	• Do not give any liquid to the person.
	• Do not give anything by mouth to an unconscious person.
	EMERGENCY INFORMATION
Have the product container	or label with you when calling a poison control center or doctor, or going for treatment.
	EMERGENCIES, PHONE 24 HOURS A DAY:
For Medical Emergencies	phone:
For Transportation Emerge	encies, including spill, leak or fire, phone: CHEMTREC®1-800-424-9300
For Product Use Information	on phone : AMVAC®1-888-462-6822
	NOTE TO PHYSICIAN
Contains petroleum distilla	te. Vomiting may cause aspiration pneumonia.

SEE SIDE/BACK PANEL FOR ADDITIONAL PRECAUTIONARY	STATEMENTS AND DIRECTI	ONS FOR USE.
EPA Reg. No. <u>5481-8992</u>	NET CONTENTS:	_GALLONS.
EPA Est. No		





[Manufactured for] AMVAC Chemical Corporation 4695 MacArthur Court, Suite 1200, Newport Beach, CA 92660 USA

[Made in USA]

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Harmful if absorbed through the skin or inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category E on an EPA chemical resistance category selection chart.

Applicators and other handlers (other than mixers and loaders) must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate, or nitrile rubber, or neoprene rubber or Viton®
- Shoes plus socks

Mixers and Loaders Must Wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate, or nitrile rubber, or neoprene rubber or viton
- Shoes plus socks
- For exposures in enclosed areas: A respirator with an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P, or HE prefilter.
- For exposure outdoors: Dust/Mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter.

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

User Safety Requirements

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, 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/PPE 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 and aquatic organisms. Drift and runoff from treated areas may be hazardous to fish and aquatic organisms in adjacent aquatic sites. 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 contaminate water when disposing of equipment wash waters.

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 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 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.

Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- Chemical-resistant gloves such as barrier laminate or nitrile rubber, or neoprene rubber, or viton
- 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 or allow others to enter treated areas until area has been irrigated and turf has dried.

PRODUCT INFORMATION

Turfcide 4F is a preventive fungicide labeled for control of certain soil borne diseases of non-residential turf (golf course tees, greens and fairways, sod farms, industrial parks, and professional and college athletic fields), ornamentals, and agricultural crops. Best results are achieved when used in a preventive program. Follow specified rates and application directions. Carefully read, understand and follow label directions.

Resistance Management

For resistance management, Turfcide 4F contains PCNB, a Group 14 fungicide. Any fungal population may contain individuals naturally resistant to Turfcide 4F and other Group 14 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same location. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance, take one or more of the following steps:

- Rotate the use of Turfcide 4F or other Group 14 fungicides with different groups that control the same pathogens.
- Use tank mixtures with fungicides from a different group that are effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.

- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical
 information related to pesticide use, and crop rotation (agricultural uses), and which considers host plant
 resistance, impact of environmental conditions on disease development, disease thresholds, as well as
 cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or pest control advisor for any additional pesticide resistancemanagement and/or IPM recommendations for specific pathogens.

For further information or to report suspected resistance contact AMVAC at (1-888-462-6822). You can also contact your pesticide distributor or university extension specialist to report resistance.

Product Restrictions

- Use of Turfcide 4F is prohibited on
 - o golf course roughs;
 - o residential sites including lawns, yards, and ornamental plants and gardens around homes and apartments;
 - o grounds around day care facilities;
 - o school yards;
 - o parks (except industrial parks);
 - o playgrounds; and
 - o athletic fields (except professional and college athletic fields under the conditions listed below).
- Do not apply this product by air.
- Chemigation or pesticide applications through irrigation systems are only permitted for ornamentals and foliar potato applications. Do not apply this product to any other crops through any type of irrigation systems.
- Do not graze treated areas or feed clippings to livestock.
- Turfcide 4F may only be used on professional and college athletic fields for the following diseases: gray snow
 mold and pink snow mold. See Use and Rate Requirements for Non-Residential Turf table for additional
 information.
- For all Non-Residential Turf use applications, Mixers and Loaders cannot handle more than 150 gallons product per day (equivalent to 600 lbs. A.I. /day).
- For Cole Crop applications, Mixers and Loaders cannot handle more than 150 gallons product per day (equivalent to 600 lbs. A.I. /day). Applicators cannot apply more than 337 gallons of product per day (1,350 lbs. A.I. /day)
- For Chemigation applications to potatoes, Mixers and Loaders cannot handle more than 150 gallons of product per day (equivalent to 600 lbs. A.I. /day).
- Do not plant root crops in PCNB treated fields within 12 months of the last application of PCNB unless PCNB is registered for use on those crops.
- Use of any hand-held application equipment is prohibited except for greenhouse use.
- Apply by ground boom application only except for greenhouse use.
- Airblast application may be used on Southern Magnolia Trees, applicators cannot handle more than 4.5 gallons of product per day (18 lbs. A.I. /day).
- For Sod farm applications, applicators cannot handle more than 425 gallons of product per day (equivalent to 1,700 lbs. A.I. /day).
- For Non-Residential Ornamentals (Woody Plants, Southern Magnolia Trees, Southern Pine Seed and Seedlings, Vegetable Bedding Plants:
 - o Groundboom, airblast, and chemigation applications: mixers/loaders cannot handle more than 190 gallons of product per day (equivalent to 760 lbs. A.I. /day).
 - o Groundboom applicators cannot handle more than 425 gallons of product per day (equivalent to 1,700 lbs. A.I. /day).
 - o Soil drench mixer/loader/applicators cannot handle more than 0.42 gallons product per day (equivalent to 1.68 lbs. A.I. /day).
- For Vegetable Bedding Plants, applicators cannot handle more than 1 pint product per 1000 square feet (equivalent to 20.4 lbs. A.I. /Acre) per season.

COMPATIBILITY

For broad spectrum disease control, this product can be tank mixed with compatible products. Follow more restrictive labeling or precautions on the label of any tank mix product. Do not exceed dosage rates on any label. This product cannot be mixed with any product containing a label prohibition against such mixing. Do not tank mix with other chemicals unless prior use has proven compatibility.

TURF

Turfcide 4F is a fungicide for the prevention and control of certain soil borne diseases on

- golf course tees, greens, and fairways,
- sod farms, and industrial parks and professional and college athletic fields where turf is grown.

Restrictions: Turfcide 4F may only be used on professional and college athletic fields for the following diseases: gray snow mold and pink snow mold. See the Use and Rate Requirements for Turf table for additional directions for professional and college athletic fields.

For best results use Turfcide 4F as a preventive application before diseases appear, however, if you do not apply as a preventive treatment, then apply Turfcide 4F at first sign of disease.

Following application, water areas treated with Turfcide 4F in order to move material down to the soil level. If treated area is subjected to flooding or unusually heavy rainfall, or if disease is severe or reappears, treat the area again.

See Use and Rate Requirements for Non-Residential Turf table for retreatment intervals.

Under certain growing conditions, a temporary discoloration of the grass may occur. This causes no harm and will disappear in a short time.

USE AND RATE REQUIREMENTS FOR NON- RESIDENTIAL TURF*

DISEASE	TURF TYPE	FL. OZ. PRODUCT PER 1000 SQ. FT	APPLICATION DIRECTIONS
Brown Patch (Rhizoctonia solani)	Warm climate grasses such as: St. Augustine Bermuda	16 to 24	Mix specified amount in 1 to 10 gals of water and apply a single application in the Spring or Fall at first indication of disease. If disease is severe or reappears, retreat area 3 to 4 weeks later. After application, immediately irrigate with 1/4 inch water.
	Dichondra	16 to 24	Mix specified amount in 5 to 10 gals of water and treat as above. After application, immediately irrigate with 1/4 inch water.
Brown Patch (Rhizoctonia solani) Anthracnose	Cool climate grasses such as: Bluegrass Ryegrass Fescue	5 to 6	Mix specified amount in 1 to 10 gals of water and apply at first sign of disease. Repeat every 7 to 10 days during warm, damp weather.

DISEASE	TURF TYPE	FL. OZ. PRODUCT PER 1000 SQ. FT	APPLICATION DIRECTIONS
(Colletotrichum cereal)	Bent		For control of existing infections, apply at specified higher rates as soon as symptoms appear.
			Do not apply at daytime temperatures of 85° or higher.
			After application, immediately irrigate with 1/4 inch water.
			Mowing may not occur in treated area until one day after application.
Melting Out/ Leaf Spot** (Drechslera spp.,	All	11 to 16	Mix specified amount in 1 to 10 gals of water and apply as a preventive application in the spring or fall of each year.
Biopolaris spp., Exserohilum spp.) Dollar Spot** (Sclerotinia			For control of existing infections, apply at specified higher rates as soon as symptoms appear.
homeocarpa)			Do not apply at daytime temperatures of 85°F or higher.
			After application, immediately irrigate with 1/4 inch water.
			Mowing may not occur in treated area until one day after application.
Gray Snow Mold*** (Typhula spp.) Pink Snow Mold***	Cool climate grass	12 to 16	Mix specified amount in 1 to 10 gals of water and apply one application prior to first snowfall or when temperatures remain below 60°F and extended wet conditions are expected.
(Microdochium nivale)			In the absence of snow cover, supplemental applications of 3 to 6 fl. oz. can be applied at 4 to 6 week intervals to maintain control when disease pressure is severe.
			Note: Turfcide 4F must be moved into the soil thatch layer to be effective.
			Applications must be followed by 1/4 inch of irrigation water or rainfall on day of application. If sufficient rainfall does not occur on day of application, then treated areas must be irrigated with 1/4 inch of water on day of application.

^{*}For all Non-Residential Turf use applications, Mixers and Loaders cannot handle more than 150 gallons product per day (equivalent to 600 lbs. A.I. /day). Single applications must not exceed 33 lbs. A.I. /A, and total seasonal applications must not exceed 66 lbs. A.I. /A.

^{**} Use not registered by California Department of Pesticide Registration

^{***}Conditions under which professional and college athletic fields may be treated:

- applications are limited to Fall and Winter months for pink or grey snow mold;
- no more than 3 applications may be made per season (October March), with a minimum of 14 days between applications;
- applicators must ensure that the treated area will be idle for at least 2 days after application.

ORNAMENTALS

Turfcide 4F can be used as a soil treatment for protection against a variety of soil borne diseases in

- greenhouse,
- shadehouse,
- nursery,
- landscape and
- field grown ornamentals.

Use of Turfcide 4F is prohibited on ornamental plants in

- residential settings including lawns, yards, gardens around homes and apartments;
- grounds around day care facilities;
- school yards;
- parks (except industrial parks);
- playgrounds; and
- athletic fields.

Continuously agitate the mixture of Turfcide 4F and water to assure uniform application.

Drench the soil thoroughly with Turfcide 4F solution for best results.

See Use and Rate Requirements for Non-Residential Ornamentals table for specific plants and diseases.

When a rate range is shown, use the lower rate on coarse textured (light) soils or when disease pressure is expected to be low. Use the higher rates on fine textured (heavy) soils in fields with a history of disease problems, or when weather conditions are expected to be unfavorable for rapid germination and growth of seedlings.

USE AND RATE REQUIREMENTS FOR NON-RESIDENTIAL ORNAMENTALS

CROP	DISEASE	PRODUCT APPLICATION RATE	AF	PPLIC	CATION DIRE	ECTIONS
Woody Plants**	Root/Stem Rot Damping Off	3/8 to 3/4 pints (6 to 12 fl. oz.)	SOIL DRENC		1	nount in 100 gallons of
	(Rhizoctonia solani)	(*)	BED, BEN		PLANTS	& FIELD GROWN
	(Pellicularia filamentosa) Black Rot		Depth of Soil (inches)		uantity of Prod Oz./Sq. Ft.	duct Drench Solution (Sq. Ft./100 gals of drench solution)
	(Sclerotinia sclerotiorum)		≤ 2 3 ≥ 4		16 24 32	800 530 400
				P	POTTED PLA	NTS
			Pot Diamete (inches)	er		Quantity of Product olution (Fl. Oz./Pot)
			4			1.5
			6			4
			8 10			7 13

CROP	DISEASE	PRODUCT APPLICATION RATE	APPLIC	CATION DIRECTIONS
			12	18
			One repeat application the first application.	may be made 4 to 6 weeks following
		5 1/4 pints (84 fl. oz.)	PLANTING IN THE 1000 sq. ft. in sufficien	PRPORATED PRIOR TO FIELD: Apply specified amount to at water to assure uniform ground incorporate to a depth of 4 inches.
Gladiolus Hyacinth Iris (bulbous) (dutch) Narcissus Tulip	Root Rot/ Stem Rot / Bulb Rot (Rhizoctonia solani) (Pellicularia solani) Bulb Rot/ Crown Rot (Sclerotinia rolfsii) (Pellicularia rolfsii) Black Rot (Sclerotinia sclerotiorum)	3 pints (48 fl. oz.)	BULB SOAK: Mix sp (7.5% concentrations).	pecified amount in 3.2 gals. of water Add 1% sticker to mixture and n. Soak bulbs for 5 minutes.
Lilies (Easter) (Asiatic) (Oriental)	Root Rot/ Stem Rot (Rhizoctonia solani) (Pellicularia solani) Bulb Rot/ Crown Rot (Sclerotinia rolfsii) (Pellicularia rolfsii) Stem Rot/Black Rot (Sclerotinia sclerotiorum)	6 to 9 pints (96 to 144 fl. oz.)	A sticking agent may b	pecified amount in 100 gals. of water. be added. Maintain good agitation in in mixture for 5 to 15 minutes.
Southern Magnolia Trees**	Magnolia Leaf Spot (Phyllostica cookeri)	3 pints (48 fl. oz.)	in 100 gallons of water 1 pint per 100 gallons. week before disease no Apply at least 4 sprays NOTE: Do not use on Single applications mu	

CROP	DISEASE	PRODUCT APPLICATION RATE	APPLICATION DIRECTIONS
			Mixers and Loaders cannot handle more than 150 gallons of product per day (equivalent to 600 lbs. A.I. /day). Applicators cannot apply more than 4.5 gallons of product per day (equivalent to 18 lbs. A.I. /day).
Southern Pine Seed or Seedlings**	Root/Stem Rot, Damping Off (Rhizoctonia spp.) (Pellicularia filamentosa) Needle Blight (Dothistromapini)	2 pints (32 fl. oz.)	BROAD CAST APPLICATION PRIOR TO PLANTING: Apply specified amount to 1000 sq. ft. in 5-10 gallons of water to insure uniform coverage. Irrigate with an additional 1/2 inch of water following treatment. Seed may be planted immediately following irrigation or within one week of irrigation.
Vegetable Bedding Plants Limited to only Container grown** Broccoli* Brussels Sprouts* Cabbage* Cauliflower* Chinese broccoli* Chinese cabbage*	Root/Stem Rot, Damping Off (Rhizoctonia solani) (Pellicularia filamentosa)	800 Sq. ft./100 gal 3/8 to 3/4 pints (6 to 12 fl. oz.)	SOIL DRENCH APPLICATIONS: For soil drench applications in the nursery or greenhouse to seedlings grown in containers or beds prior to transplanting into the field. Mix specified amount in 100 gals of water and apply according to the following guidelines: Soil Depth Coverage for Turfcide 4F Drench Solution Drench Solution Inches Fl. oz./Sq. ft. Sq. ft./100gals 2 or less 16 800 For Container Grown Plants:
			If the spray solution was prepared using 6 fl. oz. of product per 100 gals spray volume, one repeat application may be made with 12 fl. oz. product per 100 gals spray volume 4 to 6 weeks later, if necessary. Do not apply more than 1 pint product per 1000 square feet (20.4 lbs. A.I. /A) per season.

^{*}For Cole Crop applications, Mixers and Loaders cannot handle more than 150 gallons product per day (equivalent to 600 lbs. A.I. /day). Applicators cannot apply more than 337 gallons of product per day (1,350 lbs. A.I. /day). **NON-RESIDENTIAL ORNAMENTAL RESTRICTIONS FOR AMOUNT OF PRODUCT HANDLED PER DAY:

- For Non-Residential Ornamentals (Woody Plants, Southern Magnolia Trees, Southern Pine Seed and Seedlings, Vegetable Bedding Plants:
 - o Groundboom, airblast, and chemigation applications: mixers/loaders cannot handle more than 190 gallons of product per day (equivalent to 760 lbs. A.I. /day).
 - Groundboom applicators cannot handle more than 425 gallons of product per day ((equivalent to 1,700 lbs. A.I. /day).
 - Soil drench mixer/loader/applicators cannot handle more than 0.42 gallons product per day (equivalent to 1.68 lbs. A.I. /day).

AGRICULTURAL CROPS

USE AND RATE REQUIREMENTS FOR VEGETABLES AND VEGETABLE SEEDLINGS

			FL. OZ.	EGETABLE SEEDLINGS
CROP	DISEASE	QTY PRODUCT PER ACRE	PRODUCTP ER 1,000 FT. OF ROW	APPLICATION DIRECTIONS
Broccoli*, Brussels Sprouts*, Cabbage*, Chinese Broccoli*, Cauliflower*, Chinese Cabbage* (tight-headed varieties only), Collards*, Kale*, Mustard Greens*	Clubroot (Plasmodiophora brassicae)	3 pints	n/a	TRANSPLANT SOLUTION: Mix 3 pints in 100 gals of water. Use 0.5 to 0.75 pint of solution per plant. Base the specific dosage on the severity of the disease infection. Maintain agitation to hold product in suspension. Thoroughly incorporate solution into the soil. Do <u>not</u> exceed 22.5 lbs. of A.I. /A in any one season.
		5.62 gallons	55	BAND APPLICATION: Apply in 25 gals of water per acre or 5.5 fl. oz. per 100 ft. of row based on 40 inch row spacing. Spray as a 12-inch band centered on row and incorporate to a depth of 4 to 6 inches immediately prior to planting. May be used on direct seeded cole crops. Thoroughly incorporate solution into the soil. Do <u>not</u> exceed 22.5 lbs. of A.I. /A in any one season.
		5.62 gallons	n/a	BROADCAST APPLICATION: Apply in 30 gallons of water as a pre-plant broadcast spray prior to planting. Thoroughly incorporate to a depth of 4 to 6 inches using a disc or other suitable equipment. Thoroughly incorporate solution into the soil. Do <u>not</u> exceed 22.5 lbs. of A.I. /A in any one season.
	Wire Stem or Black Rot (Corticium solani)	2.8 to 3.75 gallons	n/a	BROADCAST DRENCH APPLICATION: Apply in 50 gallons of water per acre as a soil drench at the time of or immediately after seeding. Do <u>not</u> exceed 22.5 lbs. of A.I. /A in any one season.
		1.9 to 2.8 gallons	18 to 27	ROW DRENCH TREATMENTS: Apply in 35 gals of water per acre based on 40-inch row spacing. Spray as an 8-inch band centered on the row at time of or immediately after seeding. Do <u>not</u> exceed 22.5 lbs. of A.I. /A in any one season.

CROP	DISEASE	QTY PRODUCT PER ACRE	FL. OZ. PRODUCTP ER 1,000 FT. OF ROW	APPLICATION DIRECTIONS
Potatoes**	Stem Canker/Black Scurf (Rhizoctonia solani)	5 to 10 pints	5.2 to 10.4	gallons of water per acre based on 34-inch row spacing. Spray an 8½-inch band in seed furrow at time of planting. Direct spray into furrow over the seed and cover as a part of the hilling operation during planting. Do <u>not</u> exceed 5 lbs. of A.I. /A in any one season.
	White Mold (Sclerotinia sclerotiorum) Black Dot (Colletotrichum coccodes)	3 to 5 pints (1 pint of Turfcide 4F = 0.5 pounds PCNB)		CHEMIGATION APPLICATION: For disease suppression, apply Turfcide 4F at the first sign of disease or no later than just prior to or after row closure through sprinkler irrigation equipment in 0.1 to 0.3 inches of water. If disease persists, a second foliar application may be made 10 days or more after the first application and no later than 28 days before harvest. Thorough coverage of the foliage is essential. RESTRICTIONS: Apply by chemigation equipment only. For use in Idaho, Nevada, Washington and Oregon only. Do not apply within 28 days of harvest. Do not make chemigation applications of Turfcide 4F if Turfcide 4F or other PCNB products were applied as a band application in furrow at planting. Do not exceed a total of 10 pints of Turfcide 4F (5 lbs. PCNB) per acre per year when applied 28 or more days before harvest. Do not make more than 2 foliar applications. TANK MIXES Tank mix Turfcide 4F with other fungicides registered for use on potatoes to enhance and/or extend control of white mold and black dot. Apply 3 to 5 pints of Turfcide 4F per application per acre through chemigation systems in combination (tank-mixed) with any other compatible product. SEE CALIBRATION AND APPLICATION TECHNIQUES IN CHEMIGATION SECTION.

*For Cole Crop applications, Mixers and Loaders cannot handle more than 150 gallons product per day (equivalent to 600 lbs. A.I. /day). Applicators cannot apply more than 337 gallons of product per day (1,350 lbs. A.I. /day). Use on collards, kale and mustard greens restricted to the State of Georgia.

** For Chemigation applications to potatoes, Mixers and Loaders cannot handle more than 150 gallons of product per day (equivalent to 600 lbs. A.I. /day).

CHEMIGATION

APPLICATION THROUGH SPRINKLER IRRIGATION EQUIPMENT

In addition to the use rates and directions specified above, the following restrictions must be observed when using this product in any type of irrigations system:

For Ornamentals, apply Turfcide 4F only through the following irrigation systems:

1) Pressurized drench (flood) or drip (trickle), 2) Micro-irrigation such as spaghetti-tube or individual tube irrigation, 3) Hand-held calibrated irrigation equipment such as the hand-held wand with injector, 4) Calibrated overhead watering booms, 5) Ebb and flow or bench flooding sub-irrigation systems.

For Potatoes, apply Turfcide 4F only through overhead sprinklers, including center pivot, solid set or portable (wheel move) irrigation systems.

Do not apply this product through any other type of irrigation system. Crop injury or lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have any 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.

The system must contain a functional check valve, vacuum relief valve, and a 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. Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur. Do not apply when wind speed favors drift beyond the area intended for treatment.

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 of the year.

Chemigation systems connected to public water systems must contain a functional, reduced pressure zone (RPZ), backflow preventer 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 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 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, or in cases where there is no water pump, when the water pressure decreases to the point where the 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.

CALIBRATION AND APPLICATION TECHNIQUES FOR POTATOES

Center Pivot Irrigation Equipment: Operate system and injection equipment at normal pressures recommended by the manufacturer of injection equipment used. Fill tank of injection equipment with water. Operate system for one complete cycle, measuring the time required, amount of water injected and acreage contained in cycle. Mix specified amount of Turfcide 4F for acreage to be covered into the same amount of water used during calibration and inject into system continuously for one revolution. Shut off injection equipment after one revolution, but continue to operate irrigation system until Turfcide 4F has been cleared from the last sprinkler head.

Solid-Set and Portable (Wheel Move) Irrigation Equipment - Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over 10-30 minute period. Mix desired amount of Turfcide 4F for acreage to be covered into quantity of water used during calibration and operate entire system at normal pressures recommended by the manufacturer of injection equipment used for amount of time established during calibration. Inject Turfcide 4F at the end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is complete and continue to operate irrigation system until Turfcide 4F has been cleared from the last sprinkler head.

Do not run irrigation system without safety valves or other devices to prevent back siphoning of Turfcide 4F into water source. Maintain Irrigation water treated with Turfcide 4F on the treated area until the water is absorbed into the soil. Connect the tank containing Turfcide 4F to the suction side of the irrigation pump or other pressurized equipment attached to the irrigation line. Maintain agitation of the diluted Turfcide 4F in the chemical source (or slurry) tank during the entire application period.

IMPORTANT INFORMATION

To protect endangered aquatic species, use one of the following options when applying Turfcide 4F through sprinkler irrigation equipment:

- 1. Apply only when there is sustained wind away from fish-bearing waters, or
- 2. Leave a 50 foot untreated buffer between treatment area and fish-bearing waters.

To protect endangered aquatic species, use one of the following options when applying Turfcide 4F through ground

equipment:

- 1. Apply only when there is sustained wind away from fish-bearing waters,
- 2. Leave a 25 foot untreated buffer between treatment area and fish-bearing waters, or
- 3. Use low-pressure nozzles according to manufacturer's specifications that produce only coarse or very coarse droplets.

PLANT TOLERANCE:

Neither the manufacturer nor the seller has determined whether or not Turfcide 4F can be used safely on ornamental plants not specified on this label. Prior to any large scale application on such plants, the user should determine the safety of Turfcide 4F by testing a small number of the type of plants to be treated at the labeled rates for that particular group, i.e., bedding plants, foliage, etc. and observing the treated plants over a one to two week period for symptoms of phytotoxicity, which may occur as foliage burn or stunted growth.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep container closed when not in use. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

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 HANDLING:

Non-refillable container: Do not reuse or refill this container.

For containers 5 gallons in size or smaller:

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For containers larger than 5 gallons:

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ½ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; and (b) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions. THIS WARRANTY DOES NOT EXTEND TO THE USE OF THIS PRODUCT CONTRARY TO LABEL INSTRUCTIONS, OR UNDER CONDITIONS NOT REASONABLY FORESEEABLE.

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