

10163-226

2/15/2000

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# Botran® 5F Fungicide

**ACTIVE INGREDIENT:**

2, 6-dichloro-4-nitroaniline

**% BY. WT.**

46.7%

**INERT INGREDIENTS**

53.3%

**TOTAL 100.0%**

Contains 5 lbs. dicloran per gallon

## KEEP OUT OF REACH OF CHILDREN CAUTION

### STATEMENT OF PRACTICAL TREATMENT

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

**IF IN EYES:** Flush with water. If eye irritation persists, call a physician.

**IF SWALLOWED:** Drink warm water and induce vomiting by touching back of the throat with finger and/or by administering syrup of ipecac. Follow with milk and a mild cathartic (Milk of Magnesia). Call a physician or Poison Control Center immediately. Never give fluids or induce vomiting if patient is unconscious or having convulsions.

**FOR EMERGENCY MEDICAL RESPONSE AND HAZARD COMMUNICATIONS ONLY, CALL HAZARD INFORMATION SERVICES AT 1-800-228-5635 EXT. 283.**

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed. Avoid inhalation of spray mist. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash thoroughly with soap and water after handling.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Waterproof gloves

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

### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

### ENVIRONMENTAL HAZARDS

Toxic to fish. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwaters.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. 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
- Waterproof gloves
- Shoes plus socks

NET CONTENTS \_\_\_\_\_ GALLONS

EPA Reg. No. 10163-226  
EPA Est. No. 67545-AZ-1

**Gowan** **ACCEPTED**  
FEB 15 2000

Under the Federal Insecticide, Fungicide and Rodenticide Act, as amended for the pesticide registered under EPA Reg. No. 10163-226

Gowan Company  
P.O. Box 5569  
Yuma, AZ 86366-5569

**CHEMIGATION STATEMENT**

This product can be applied through the following types of chemigation systems: Sprinkler, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move, or drip irrigation systems. Do not apply this product through any other type of irrigation system. Refer to section entitled GENERAL CHEMIGATION USE INSTRUCTIONS for specific directions for use.

**GENERAL USE DIRECTIONS**

Apply lower rates of BOTRAN 5F Fungicide when disease pressure is anticipated to be light. Use higher rates for severe disease pressure.

**COMPATIBILITY**

BOTRAN 5F Fungicide can normally be mixed with other fungicides, insecticides, or defoliant. It is suggested that such combinations be used on a small number of plants before treating large areas. However, combination sprays of BOTRAN 5F and miscible oil formulations of insecticides, particularly organic phosphorous compounds, may cause plant injury. Check for compatibility before large-scale treatment. Do not combine with any products unless previous use or small-scale treatment has proven mixture is physically compatible and safe to plants. When mixing BOTRAN 5F Fungicide with any other product, add wettable powder or dry flowable formulations first, and then add liquid products.

**DILUTION DIRECTIONS**

The rate required for thorough, uniform coverage varies with plant growth at time of application. Except as specified for certain uses, the following rates are intended to cover a broad range of conditions.

**DILUTE APPLICATION:** Field, row, greenhouse, and nursery crops: Apply specified rate in 50-100 gals. of water per acre. **Tree and vine crops:** Apply specified rate in 50-500 gals. of water per acre.

**CONCENTRATE APPLICATION:** Field, row, greenhouse, and nursery crops: Apply specified rate in not less than 10 gals. of water per acre. **Tree and vine crops:** Apply specified rate in 50-100 gals. of water per acre. Special concentrate equipment is necessary for these applications.

**AIR APPLICATION:** Field, row, tree, and vine crops: Apply specified rate in a minimum of 5 gals. of water per acre.

**PREHARVEST INTERVAL**

The required days between the last application and harvest are given in ( ) after each crop name.

**USE LIMITATIONS**

Do not exceed the maximum rate of BOTRAN 5F Fungicide per acre or the time limitations specified for the individual crops.

**DIRECTIONS FOR USE ON TREE AND VINE CROPS**

CROP	DISEASE	DOSAGE QTS./ACRE	COMMENTS
APRICOTS (10)	Fruit decay <i>Monilinia</i> brown rot <i>Rhizopus</i> rot	<sup>4</sup> / <sub>5</sub> -3 <sup>1</sup> / <sub>5</sub>	Apply 18 days and 10 days before harvest.
GRAPES (1)	Bunch rot <i>Botrytis</i> rot <i>Botrytis</i> stem rot Storage rot <i>Botrytis cinerea</i>	1 <sup>1</sup> / <sub>5</sub> -2 <sup>4</sup> / <sub>5</sub>	Begin applications when disease is anticipated. Repeat applications at 7-day intervals or as needed. Up to 3 <sup>1</sup> / <sub>5</sub> qts. of BOTRAN 5F may be applied per acre per season. BOTRAN 5F used in combination with sulfur products may cause marking to sensitive varieties such as Fiesta. <b>Note:</b> Use is limited to grapes grown west of the Rocky Mountains only.
PEACHES (10), NECTARINES (10)	Blossom blight <i>Monilinia</i> Fruit decay <i>Monilinia</i> brown rot <i>Rhizopus</i> rot	<sup>4</sup> / <sub>5</sub> - 3 <sup>1</sup> / <sub>5</sub>	For blossom blight, apply at pink bud and full bloom. For fruit decay, apply 18 days and 10 days before harvest.
PLUMS, PRUNES	Blossom blight <i>Monilinia</i> brown rot	<sup>4</sup> / <sub>5</sub> - 3 <sup>1</sup> / <sub>5</sub>	Apply at popcorn and full bloom.
SWEET CHERRIES (10)	Blossom blight <i>Monilinia</i> Fruit decay <i>Monilinia</i> brown rot <i>Rhizopus</i> rot	<sup>4</sup> / <sub>5</sub> - 3 <sup>1</sup> / <sub>5</sub>	For blossom blight, apply at popcorn, bloom, full bloom and petal fall. For fruit decay, apply 10 days before harvest.

**DIRECTIONS FOR USE ON ROW CROPS**

CROP	DISEASE	DOSAGE QTS./ACRE	COMMENTS
CELERY, FLORENCE FENNEL (See Text for PHI)	Pink rot <i>Sclerotinia sclerotiorum</i>	2  OR 3 <sup>1</sup> / <sub>5</sub>	<b>Multiple applications:</b> Begin application when disease is anticipated or approximately 10 weeks before harvest. Repeat at 7-day intervals in summer or 14-day intervals in fall and winter. May be applied up to 7 days before harvest. OR <b>Single Application:</b> If early disease is not likely, make a single application of 3 <sup>1</sup> / <sub>5</sub> qts. of BOTRAN 5F Fungicide per acre 4-8 weeks before harvest. Use a sprayer with a drop nozzle boom to direct spray to the base of plants and adjacent soil.
ENDIVE (ESCAROLE) (14)	Gray mold rot <i>Botrytis cinerea</i>	1 <sup>1</sup> / <sub>5</sub>	Apply 7 days following transplanting. Repeat application when plants are half-mature. Do not apply to wilted plants or seedlings. OR Apply at thinning and repeat application 7 days later. Use a sprayer with a drop nozzle boom to direct spray to the lower portion of plants and surrounding soil.
			<ul style="list-style-type: none"> <li>▪ <b>Notes:</b> Some leaf bronzing may be noted soon after application, but the effect is of a temporary nature.</li> <li>▪ Two applications of BOTRAN 5F Fungicide per season may be applied.</li> </ul>

**DIRECTIONS FOR USE ON ROW CROPS (Continued)**

CROP	DISEASE	DOSAGE QTS./ACRE	COMMENTS
LETTUCE (LEAF AND HEAD) (14)	Drop rot	<sup>3</sup> / <sub>5</sub>	At time of planting: Apply <sup>3</sup> / <sub>5</sub> qt. in a 4-5 inch band over seedlings after seeding or before transplanting. Transplants may be sprayed following planting.
	Watery soft rot <i>Sclerotinia sclerotiorum</i>	<sup>1</sup> / <sub>5</sub> -1 <sup>1</sup> / <sub>5</sub>	Prethinning: Apply <sup>1</sup> / <sub>5</sub> -1 <sup>1</sup> / <sub>5</sub> qts. as a directed spray over unthinned seedlings.
	<i>Sclerotinia minor</i> Gray mold rot <i>Botrytis cinerea</i>	1 <sup>4</sup> / <sub>5</sub> -3 <sup>1</sup> / <sub>5</sub>	Postthinning (direct seeded) and Established Transplants: Apply 1 <sup>4</sup> / <sub>5</sub> -3 <sup>1</sup> / <sub>5</sub> qts. as a basal drench in 50-100 gals. of water as soon after thinning as possible. Following this treatment, soil surrounding the plants should not be disturbed. A second post-thinning treatment may be made if significant soil disturbance occurs or high soil moisture conditions exist.
<ul style="list-style-type: none"> <li>Note: One or more of the above treatments may be made to the same crop; however, do not apply more than 3<sup>1</sup>/<sub>5</sub> qts. of Botran per acre per crop or within 14 days of harvest.</li> <li>Certain environmental conditions or tank-mix combinations may cause minor leaf bronzing. The effect is temporary and quickly outgrown.</li> </ul>			
ONIONS (14), GARLIC (14), SHALLOTS (14)	White rot <i>Sclerotium cepivorum</i>	2	Direct seeded: For white rot control, apply a 5 inch band over seed row/bed and incorporate in to 1 <sup>1</sup> / <sub>2</sub> inches of soil 1-2 weeks before onions are seeded. Use restricted to eastern Oregon, eastern Washington, and western Idaho. Planting sets or buds: For white rot control in furrow applications, use low-pressure spray equipment. Use 50 mesh or coarser screens. Center the front nozzle on the furrow. Spray a 5-inch band on 40-inch beds.
	Leaf blight <i>Botrytis rot</i> <i>Botrytis cinerea</i>	<sup>2</sup> / <sub>10</sub> -1 <sup>2</sup> / <sub>5</sub> *	For <i>Botrytis</i> , apply when disease is anticipated. Repeat at 14-day intervals if necessary. Up to 2 qts. of BOTRAN 5F Fungicide may be applied per acre per season. * In California use 1 <sup>3</sup> / <sub>5</sub> qts./acre.
<ul style="list-style-type: none"> <li>Note: Do not plant spinach as a follow-up crop in treated soil.</li> </ul>			
POTATOES (14)	<i>Botrytis</i> blight White mold <i>Sclerotinia sclerotiorum</i>	1 <sup>1</sup> / <sub>5</sub>	Apply beginning at layby. Continue applications at 10-14 day intervals. Note: Use is limited to the North Central (MI, MN, ND & WI) and North Western (ID, OR & WA) states only.
SNAP BEANS (2)	White mold <i>Sclerotinia sclerotiorum</i> ( <i>Sclerotinirose</i> )	1 <sup>1</sup> / <sub>3</sub>	Bush varieites: Begin applications when disease is anticipated and continue at 7-day intervals during periods favorable to the development of disease.
		2 <sup>1</sup> / <sub>5</sub>	Pole varieties: Begin applications when disease is anticipated and continue at 7-day intervals during periods favorable to the development of disease.
<ul style="list-style-type: none"> <li>Do not feed treated foliage to livestock.</li> </ul>			
CROP	DISEASE	DOSAGE/ QTS.	COMMENTS
SWEET- POTATOES	Scurf <i>Monilochaetes infuscans</i>	<sup>3</sup> / <sub>5</sub>	Seed dip: Mix recommended rate in 7 <sup>1</sup> / <sub>2</sub> gals. of water. Dip seed sweet potatoes 10 to 15 seconds in a well-agitated Botran 5F Fungicide suspension. Drain sweet potatoes and bed promptly. Prepare fresh Botran 5F Fungicide suspension daily.
		1 <sup>4</sup> / <sub>5</sub> -2 <sup>1</sup> / <sub>4</sub>	Plantbed spray: Mix recommended rate in 14 gals. of water per 1,000 sq. ft. of plantbed. Spray or sprinkle Botran 5F Fungicide suspension over bedded sweet potatoes before covering them with soil.
<ul style="list-style-type: none"> <li>Caution: Do not plant tomatoes as a follow-up crop.</li> </ul>			

**DIRECTIONS FOR USE ON GREENHOUSE AND HOTHOUSE**

CROP	DISEASE	DOSAGE QTS./43,560 SQ. FT.	COMMENTS
CUCUMBERS (1)	White mold <i>Sclerotinia sclerotiorum</i>	<sup>4</sup> / <sub>5</sub>	Apply when disease first appears to diseased areas of plants. Additional applications may be required after 14 days.
LETTUCE (LEAF ONLY) (14)	Gray mold rot <i>Botrytis cinerea</i>	1 <sup>2</sup> / <sub>5</sub>	Apply 7 days following transplanting. Repeat application when plants are half-mature. Do not apply to wilted plants or seedlings. Note: Some leaf bronzing may be noted soon after application, but the effect is of a temporary nature.
RHUBARB (3)	<i>Botrytis</i> leaf rot	<sup>4</sup> / <sub>5</sub>	Begin applications when first buds emerge from crowns and repeat at weekly intervals.
TOMATOES (10)	Stem canker <i>Botrytis</i>	<sup>3</sup> / <sub>5</sub>	Spray stem of plant from ground level up to a height of 18 to 24 inches. Repeat weekly or as necessary. Seedlings or newly set transplants may be injured by drenching.

**DIRECTIONS FOR USE ON ORNAMENTALS AND ORNAMENTAL CROPS**

CROP	DISEASE	DOSAGE - QTS.	COMMENTS
CHRYSAN- THEMUMS, GERANIUMS, ROSES	Blight <i>Botrytis</i>	<sup>2</sup> / <sub>5</sub> per 150-200 gals.	Apply to stock cuttings or greenhouse plants. Begin when disease is anticipated or first appears. Spray foliage and flowers at 7-14 day intervals. During prolonged damp, cool periods, apply every 5-7 days.

**DIRECTIONS FOR USE ON ORNAMENTALS AND ORNAMENTAL CROPS (Continued)**

CROP	DISEASE	DOSAGE - QTS.	COMMENTS
GLADIOLUS	Blight <i>Botrytis</i>	<sup>4</sup> / <sub>5</sub> per 100 gals.	<b>Foliar/Field:</b> For <i>Botrytis</i> control, apply spray mixture with enough pressure to force fungicide between spikes. Use full coverage spray.
		<sup>4</sup> / <sub>5</sub> per 100 gals.	<b>Stored:</b> For <i>Botrytis</i> control, mix recommended rate in 100 gals. of water. Spray Botran suspension on slower spikes after cutting and before shipment or storage.
	Dry rot <i>Stromatinia</i>	<sup>4</sup> / <sub>5</sub> per 75 gals.	<b>Bulb Dip:</b> For dry rot control, mix recommended rate in 75 gals. of water. Soak bulbs for 20-30 seconds in a suspension.
		3 <sup>1</sup> / <sub>5</sub> per acre	<b>Furrow:</b> For dry rot control, spray a band into furrow at planting time so that treated soil surrounds coms. Treat a 3-inch band with spray directed at coms in furrows spaced 3 feet apart (14,250 linear feet of furrow per acre.)
ROSES, HYDRANGEAS	Blight <i>Botrytis</i>	<sup>4</sup> / <sub>5</sub> per 100 gals.	<b>Field plants:</b> Spray before shipment or storage. <b>Stored plants:</b> Spray storage area thoroughly. Spray or dip plants. Repeat application during long storage periods.
CONIFERS, CHRISTMAS TREES (NURSERY, FIELD, GREENHOUSE, CONTAINER, BARE ROOT STOCK)	Blight <i>Botrytis</i>	<sup>4</sup> / <sub>5</sub> - 1 <sup>4</sup> / <sub>5</sub> per acre	<b>Foliar:</b> Mix recommended rate per acre in sufficient water for thorough and complete coverage. Apply as a foliar spray when disease is anticipated or first appears. Use 1 <sup>3</sup> / <sub>5</sub> for severe disease pressure. Repeat at 10-14 day intervals. Spray foliage until thoroughly wet. Alternating BOTRAN 5F with other fungicides is recommended.
		<sup>4</sup> / <sub>5</sub> per 100 gals.	<b>Stored:</b> Spray storage area thoroughly. Spray or dip plants. Repeat application during long storage periods.

**GENERAL CHEMIGATION USE INSTRUCTIONS**

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

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

If you have 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 SPRINKLER 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 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.

In addition, all directions and requirements specified for SPRINKLER OR DRIP CHEMIGATION SYSTEMS must be followed.

**SPRINKLER OR DRIP CHEMIGATION SYSTEMS**

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

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

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent

fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

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

BOTRAN 5F should be injected at the end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until all BOTRAN 5F has been cleared from the last emitter.

**STORAGE AND DISPOSAL**

DO NOT contaminate water, food or feed by storage or disposal.

**STORAGE:** Store in original container and keep closed. Store in a cool, dry place.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. **DO NOT REUSE EMPTY CONTAINER.**

**FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL CHEMTREC® (800) 424-9300.**

For other product information contact Gowan Company or see Material Safety Data Sheet

**NOTICE ON CONDITIONS OF SALE**

Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility, including injury or damage, resulting from its misuse as such, or in combination with other materials.

BOTRAN® 5F is a registered trademark of Gowan Company  
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