STATE OF HAWAII
Department of Agriculture
ACCEPTED
LICENSE NO.
9794.44

Botran® 5F
Fungicide

ACTIVE INGREDIENT:	% BY. WT.
2, 6-dichloro-4-nitroaniline	46.7%
OTHER INGREDIENTS	53.3%
TOTAL	100.0%

Contains 5 lbs. dicloran per gallon

KEEP OUT OF REACH OF CHILDREN
CAUTION

FIRST AID	
If on skin or clothing	• Take off contaminated clothing. • 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, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • 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 swallowed	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
HOT LINE NUMBER Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-888-478-0798 for emergency medical treatment information.	

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

Harmful if absorbed through skin. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist of vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

NET CONTENTS _____ GALLONS

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

Gowan®
The Go To Company

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.
All mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves (except for pilots)

See engineering controls for additional requirements.
Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instruction for washables exists, use detergent and hot water.
Keep and wash PPE separately from other laundry.

Early Entry Personal Protective Equipment
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

USER SAFETY RECOMMENDATIONS

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

ENGINEERING CONTROLS

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

ENVIRONMENTAL HAZARDS

This product is toxic to fish.

This product may contaminate water through runoff. This product has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product.

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment, washwaters or rinsate.

This chemical can contaminate surface water through spray or dust applications. Under some conditions, it may also have a potential for runoff into surface water after application.

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.

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.
All other crops and use patterns: For all other crops and use patterns, do not enter or allow worker entry during the restricted entry interval 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 made of any waterproof material
- Shoes plus socks

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, and relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator and grower must evaluate all factors and make appropriate adjustments when applying this product. Do not make any type of application into temperature inversions.
WIND SPEED: Do not apply at wind speeds greater than 10 mph at the application site.
DROPLET SIZE: Apply as a medium or coarser spray (ASAI standard 572).
RELEASE HEIGHT (GROUND APPLICATION): Apply using a nozzle height of no more than 4 feet above the ground or crop canopy.
RELEASE HEIGHT (AERIAL APPLICATION): Do not release spray at a height greater than 10 feet above the ground or crop canopy.

Additional requirements for aerial applications:

- The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter
- Aerial applicators must consider flight speed and nozzle orientation in determining droplet size
- When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind

Additional requirements for airblast applications:

- Direct sprays into the canopy
- Turn off outward pointing nozzles at row ends and when spraying outer rows

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.

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 defoliants. 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 ROW CROPS

CROP	DISEASE	DOSAGE QTS./ACRE	COMMENTS
CELERY (7)	Pink rot *Sclerotinia sclerotiorum*	2 OR 3.2	**Multiple applications:** 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 **Single Application:** If early disease is not likely, make a single application of 3.2 qts. of BOTRAN 5F Fungicide per acre 7 days before harvest. Use a sprayer with a drop nozzle boom to direct spray to the base of plants and adjacent soil.
	• *****Do not apply less than 2 quarts per application in California. • Do not apply more than 4 quarts formulated product per acre per year (5lbAI/acre/year).		
FLORENCE FENNEL (7)	Pink rot *Sclerotinia sclerotiorum*	2 OR 3.2	**Multiple applications:** 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 **Single Application:** If early disease is not likely, make a single application of 3.2 qts. of BOTRAN 5F Fungicide per acre 7 days before harvest. Use a sprayer with a drop nozzle boom to direct spray to the base of plants and adjacent soil.
	• *Do not apply less than 2 quarts per application in California. • Do not apply more than 3.2 quarts formulated product per acre per year.		

CROP	DISEASE	DOSAGE QTS./ACRE	COMMENTS
ENDIVE (ESCAROLE) (14)	Gray mold rot *Botrytis cinerea*	1.6	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.
	• Do not apply more than 3.2 quarts formulated product per acre per year. • **Notes:** Some leaf bronzing may be noted soon after application, but the effect is of a temporary nature. • Two applications of BOTRAN 5F Fungicide per season may be applied.		
LETTUCE (LEAF AND HEAD) (14)	Drop rot Watery soft rot *Sclerotinia sclerotiorum* *Sclerotinia minor* Gray mold rot *Botrytis cinerea*	0.6	**At time of planting:** Apply 0.6 qt. in a 4-6 inch band over seedlings after seeding or before transplanting. Transplants may be sprayed following planting.
		0.6 -1.8	**Prethinning:** Apply 0.6 - 1.8 qts. as a directed spray over unthinned seedlings.
		1.8 - 3.2	**Post-thinning (direct seeded) and Established Transplants:** Apply 1.8 - 3.2 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.
	• Do not apply more than 3.2 quarts formulated product per acre per year. • **Note:** One or more of the above treatments may be made to the same crop; however, do not apply more than 3.2 qts. of Botran per acre per crop or within 14 days of harvest. • **Note: When applying in a band, do not reduce the per acre rate.** • Certain environmental conditions or tank-mix combinations may cause minor leaf bronzing which should be temporary and quickly outgrown.		
ONIONS (14), GARLIC (14), SHALLOTS (14)	White rot *Sclerotium cepivorum*	2 – 3.2	**Direct seeded:** For white rot control, apply a 5 inch band over seed row/bed and incorporate in to 1.5 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 *Botrytis* rot *Botrytis cinerea*	1 – 2	Apply when disease is anticipated. Repeat at 14-day intervals if necessary.
	Neck rot *Botrytis allii (except CA)*	1 -2	Apply when disease is anticipated. Repeat at 14-day intervals if necessary.
	• Do not apply more than 3.2 quarts formulated product per acre per year.		
SNAP BEANS (2)	White mold *Sclerotinia sclerotiorum* (*Sclerotiniose*)	1.3	**Bush varieties:** Begin applications when disease is anticipated and continue at 7-day intervals during periods favorable to the development of disease.
		1.6 (except CA)	**Pole varieties:** Begin applications when disease is anticipated and continue at 7-day intervals during periods favorable to the development of disease.
	• Do not apply more than 3.2 quarts formulated product per acre per year. • Do not feed treated foliage to livestock.		

DIRECTIONS FOR USE ON SWEET POTATOES

CROP	DISEASE	COMMENTS
SWEET-POTATOES	Scurf *Monilochaetes infuscans* Sclerotial blight *Sclerotium rolfsii*	**Seed dip:** Mix 0.6 quarts of Botran 5F in 7.5 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.
		Plant bed spray: For a 42 inch plant bed, mix 5.73 oz of Botran 5F in 14 gals. of water per 1000 linear ft. of plant bed. Spray or sprinkle Botran suspension over bedded sweet potatoes before covering them with soil. Do not exceed 3.2 quarts per acre.
	• Do not apply more than 3.2 quarts formulated product per acre per year. • Restriction: Do not plant tomatoes as a follow-up crop.	
	Postharvest decay *Rhizopus* rot (except CA)	**Postharvest:** Mix 0.6 quarts of Botran 5F rate in 100 gals. of water. Spray using 8001 fan-shaped nozzle at 50 - 70 psi immediately after washing while the potatoes are conveyed on chain rollers or belts. Do not rinse after treatment. In recirculating systems, as volume decreases, make up to original volume with suspension equivalent to 0.6 qt. of Botran 5F Fungicide per 100 gals. of water. Where black rot is a problem, do not recirculate used spray suspension.
		Root Dip: Dip roots for 5 to 10 seconds in well-agitated suspension of 0.6 quarts of Botran 5F in 100 gallons of water. Do not rinse after treatment. Add 0.3 qt. Botran 5F Fungicide to 100 gals. of treating suspension after 500 bushels are treated. After each 1000 bushels treated, drain and flush tank. Refill with fresh dip suspension.

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.
PESTICIDE 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: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. 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 ¼ 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. After cleaning, if recycling is not available, 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.
Mini-Bulk Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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 OF CONDITIONS OF SALE AND WARRANTY AND LIABILTY LIMITATIONS

Important: Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product. If terms are not acceptable return the unopened container for a full refund.

Our directions for use of this product are based on tests believed to be reliable. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, inadequate performance, or other unintended consequences may result due to soil or weather conditions, off target movement, presence of other materials, method of use or application, and other factors, all of which are beyond the control of Gowan Company. To the extent consistent with applicable law, all such risks are assumed by the Buyer and User.

Gowan Company warrants that this product conforms to the specifications on the label when used in strict conformance with Direction for Use, subject to the above stated risk limitations. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, GOWAN COMPANY MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY

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