

10163-204

7/23/2002

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Betasan[®] 7-G

A selective herbicide with the preemergent applications intended for control of crabgrass and annual bluegrass in turfgrass

ACTIVE INGREDIENT:

Bensulide: S-(O,O-Diisopropyl phosphorodithioate) ester of N-(2-mercaptoethyl) benzenesulfonamide..... 7.0%

OTHER INGREDIENTS 93.0%
TOTAL 100.0%

This product contains 7 pounds of bensulide per 100 pounds.

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID Organophosphate Insecticide	
If on skin or clothing	<ul style="list-style-type: none"> 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 in eyes	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Call 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.
If inhaled	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
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.	
NOTE TO PHYSICIAN	
This product is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present, atropine by injection is antidotal. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

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 G on an EPA chemical-resistance category selection chart.

Applicators using a push type spreader and all loaders must wear:

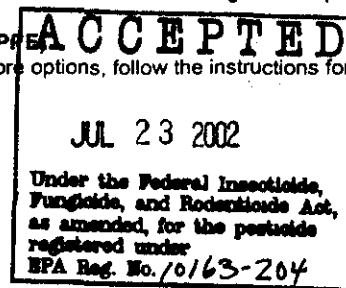
- Coveralls over long-sleeved shirt and long pants
- Chemical resistant gloves such as barrier laminate or viton ≥14 mil.
- Chemical resistant footwear plus socks
- A NIOSH approved respirator with any N, R, P, or HE filter

All other applicators and handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or viton ≥14 mil.
- Shoes plus socks
- In addition to the above, for-hire applicators (non-golf-course employees) must wear a NIOSH-approved respirator with any N, R, P, or HE filter (due to risk from repeated exposures) when applying this product to golf courses.

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

NET CONTENTS _____ POUNDS



EPA Reg. No: 10163-204
EPA Est. No: 66196-CA-1



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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 chemical is toxic to fish and aquatic invertebrates. 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 cleaning equipment or disposing of equipment washwater or rinsate. Do not apply when weather conditions favor drift from the treated area.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

This product may impair reproduction in birds if used during the breeding season.

WEEDS CONTROLLED

Smooth Crabgrass (<i>Digitaria ischaemum</i>)	Goosegrass (<i>Elaeusine indica</i>)
Hairy Crabgrass (<i>Digitaria sanguinalis</i>)	Annual bluegrass (<i>Poa annua</i>)
Redroot pigweed (<i>Amaranthus retroflexus</i>)	Shepherdspurse (<i>Capsella bursa-pastoris</i>)
Barnyardgrass (Watergrass) (<i>Echinochloa</i> spp.)	Deadnettle (Henbit) (<i>Lamium</i> spp.)
Lambsquarters (<i>Chenopodium album</i>)	

DIRECTIONS FOR USE

This product may only be applied by tractor-drawn spreader or by push type spreader.

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

Not for use on plants being grown for sale or other commercial use, commercial seed production or for research purposes. For use on plants intended for aesthetic purposes, golf courses, lawns and grounds.

GENERAL USE PRECAUTIONS AND RESTRICTIONS

ENTRY RESTRICTIONS

IMPORTANT: THIS PRODUCT WILL NOT WORK UNLESS IT IS WATERED IN FOR 10-15 MINUTES FOLLOWING APPLICATION. FOR SAFETY REASONS, WATER THIS PRODUCT IN AS SOON AS POSSIBLE FOLLOWING APPLICATION FOR 10-15 MINUTES AND DO NOT ALLOW CHILDREN OR PETS ON TREATED AREAS UNTIL DRY FOLLOWING THE WATERING.

APPLICATION RESTRICTIONS

WATERING-IN MUST BE PERFORMED BY THE COMMERCIAL APPLICATOR OR THE COMMERCIAL APPLICATOR MUST PROVIDE THE ABOVE WATERING-IN INSTRUCTIONS TO THE RESIDENT IN WRITING USING BOLD FACE TYPE AND/OR RED PRINT OR OTHER METHODS TO ENSURE THE WARNING IS PROMINENTLY DISPLAYED ON THE MATERIAL PROVIDED TO THE RESIDENT.

- Do not apply this product in a way that will contact workers or other persons
- For use only on golf courses (greens, tees and bentgrass fairways only) and on residential lawns.
- Do not use on parks, recreational areas, or other public sites.
- Applications on bentgrass fairways is limited to following states: OH, PA, NY, MI, CT, MA, IN, IL, NJ, WV, MN, WI, VT, NH, RI, DE, MD, VA). Applications on bentgrass fairways may only be made in the Fall and are limited to one application per year.
- Applications to greens and tees are limited to two per year.
- Read all directions before using this product
- BETASAN 7-G should be used only for EPA-registered sites and at specified use rates.
- Do not allow children or pets on treated lawn until this product has been watered into the soil, and the grass is completely dry.
- BETASAN 7-G is recommended for use on mineral soils only.
- Do not apply peat moss to lawns before treating with BETASAN 7-G.

GENERAL INFORMATION

Use Betasan 7-G on home lawns and golf courses for the control of crabgrass, annual bluegrass, and other annual weeds.

Application of this product must precede the emergence of weeds from the soil. Crabgrass will emerge from the soil from 4-6 weeks before it is visible above the lawn sod. If weeds are visible above the soil, it is too late to apply BETASAN 7-G.

Remove leaves, dead or tall grass, and other debris before applying this product to the turfgrass. Any weeds present around ornamentals must be removed before applying BETASAN 7-G.

APPLICATION SCHEDULES

The most effective program for control of crabgrass, goosegrass, annual bluegrass and other annual weeds is designed for local conditions. Two or more applications per year may be necessary, at specified application rates for a particular weed problem. For additional information regarding timing and rate of application, consult weed specialists of the State Agricultural Extension Service or the State Agricultural Experiment Station.

Grass Lawns: BETASAN 7-G should be applied to well established lawns only. This product can be used on the following established turfgrasses: Bahiagrass, Bentgrass spp., Bermudagrass spp., Perennial bluegrass, Centipedegrass, Fescue spp., Pensacola bahiagrass, Perennial ryegrass, Rough stalk bluegrass (*Poa trivialis*), St. Augustinegrass, Red top, and Zoysiagrass. Betasan has been used safely on many Bentgrass cultivars. Since all cultivars have not been evaluated the user is urged to test the product on new cultivars with caution and on a small scale basis.

Dichondra Lawns: BETASAN 7-G can be applied to dichondra lawns at the time of seeding or anytime thereafter.

For the control of crabgrass, apply this product at the recommended rate anytime from fall (September or October) through early spring for spring and summer control. With a late winter or early spring application, the application must be made prior to the crabgrass emergence.

For the control of annual bluegrass and other annual weeds, apply BETASAN 7-G at the recommended rates before the weeds emerge from the soil.

When the germination of crabgrass, annual bluegrass, and other weeds extends into the late summer and early fall a second application of BETASAN 7-G at the recommended rate should be made 4-5 months after the initial application.

BETASAN 7-G should be applied with a lawn spreader or other granular equipment that provides uniform distribution or coverage. Uniform applications can be made by spreading one-half the required amount of product over the area to be treated. Then, apply the remainder of the product at right angles or perpendicular to the pattern of the first application.

APPLICATION RATES

Apply a maximum of 357 pounds BETASAN 7-G per acre per year in two or more applications depending upon the weed species and the degree of infestation. Or, the equivalent maximum rate is 8.2 pounds of BETASAN 7-G per 1000 sq. ft. per year.

If weed specialists are unavailable to provide specific local recommendations, follow these directions:

Crabgrass only: Apply uniformly 107-143 pounds of BETASAN 7-G per acre. Or, apply 2.4-3.2 pounds of BETASAN 7-G per 1000 sq. ft.

Annual Bluegrass, Goosegrass, and Other Annual Weeds: Apply uniformly 180 pounds of BETASAN 7-G per acre. Or, apply 4.1 pounds of BETASAN 7-G per 1000 sq. ft.

APPLICATION RATES PER ACRE FOR BETASAN 7-G

Application Schedule	POUNDS OF BETASAN 7-G	
	Crabgrass only	Annual bluegrass, barnyardgrass, fall panicum, foxtails, and other annual weeds
Single application	107 - 143	180
Sequential applications	107 - 143	107 - 143

APPLICATION RATES PER 1000 SQ. FT. FOR BETASAN 7-G

Application Schedule	POUNDS OF BETASAN 7-G	
	Crabgrass only	Annual bluegrass, barnyardgrass, fall panicum, foxtails, and other annual weeds.
Single application	2.4 - 3.2	4.1
Sequential applications	2.4 - 3.2	2.4 - 3.2

Sprinkle or irrigate the treated area with water for 10-15 minutes after application to wash the BETASAN 7-G into the soil.

When a weed control program involves 2-3 applications of BETASAN 7-G for crabgrass, goosegrass, and annual bluegrass, the application rate may be reduced to 107-143 pounds of product per acre with the higher rate for heavier infestations.

SPREADER SETTINGS FOR TWO TYPES OF EQUIPMENT

Spreader Type	Rate per Acre	Rate per 1000 sq. ft.	Settings with 1 Trip per application	Settings with 2 Trips per application	Pattern Width
Cyclone	107	2.4	3.3	3	6 ½ ft.
	180	4.1	3.8	3.5	6 ½ ft.
Scott's	107	2.4	2.8	2.2	20 inches
	180	4.1	3.9	3.1	20 inches

RESEEDING

Herbicides that provide effective control of annual grasses may affect new lawn grass seedlings which germinate after treatment. Proper fertilization and watering will encourage the existing turfgrass to fill in the thin or bare spots formerly occupied by crabgrass.

The following procedures are suggested to minimize any stunting of turfgrass which may occur when reseeding into areas treated with BETASAN 7-G:

1. Do not reseed within 4 months after application.
2. Renovate the area to be seeded by raking thoroughly to scarify the soil surface. Where practical, mix peat into the soil to provide an optimum seedbed.
3. When turf diseases or physiological disorders require reseeding sooner than 4 months after the application of this product, apply powdered activated charcoal prior to reseeding to deactivate the bensulide.
4. Apply the activated charcoal at 7 pounds per 1000 sq. ft. in 14 gallons of water. Or the equivalent rate is 300 pounds of activated charcoal per acre in 600 gallons of water.
5. Following application, irrigate the turf with sufficient water to wash the charcoal into the soil.
6. Reseed no sooner than 7 days after applying the charcoal.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry place. Avoid contamination of food, feed, or domestic animal water supplies.

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: Completely empty into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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.

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