

BETASAN 12.5-G

A selective herbicide with the preemergent applications intended to control of crabgrass and annual bluegrass in turfgrass, ornamental plantings, and groundcovers.

ACTIVE INGREDIENT:

Bensulide: S-(O,O-Diisopropyl phosphorodithioate) ester of N-(2-mercaptoethyl) benzenesulfonamide..... 12.5%

INERT INGREDIENTS:..... 87.5%

TOTAL 100.0%

This product contains 12.5 pounds of bensulide per 100 pounds.

~~ACCEPTED~~
~~with certain NIS~~
In EPA Letter Dated

MAR 19 1996

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

10163-198

KEEP OUT OF REACH OF CHILDREN

WARNING

See side panels for the Statement of Practical Treatment and Additional Precautionary Statements.

NET WEIGHT _____ POUNDS

EPA Reg. No: 10163-198

EPA Est. No:

Manufactured by: The Gowan Company
P.O. Box 5569
Yuma, AZ 85366-5569P

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PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING: Harmful if swallowed. Avoid breathing dust. Causes substantial but temporary eye injury. Do not get in eyes, on skin, or on clothing. Wear goggles or safety glasses when handling.

Wash thoroughly with soap and water after handling and before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

Statement of Practical Treatment

If a known exposure occurs or is suspected, immediately start the procedures given below and simultaneously contact a Poison Control Center, a physician, or the nearest hospital.

NOTE: Be sure to advise the person contacted that the active ingredient in this compound is a cholinesterase inhibitor. Describe the type of exposure, the victim's symptoms, and follow the advice given.

IF SWALLOWED: Give several glasses of water and induce vomiting by placing a finger on the back of the victim's tongue. Give fluid until the vomitus is clear. Do not induce vomiting or give anything by mouth to an unconscious person.

IF ON SKIN: Flush all affected areas with plenty of water for several minutes. Remove and clean contaminated clothing and shoes. Seek medical attention if irritation occurs.

IF IN EYES: Immediately flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and eyelids with water. Get medical attention immediately.

IF INHALED: Remove to fresh air. Seek medical attention if respiratory irritation occurs or if breathing becomes difficult.

NOTE TO PHYSICIAN: Should cholinesterase inhibition occur, atropine by injection is antidotal. 2-PAM (Protopam Chloride) is also antidotal when administered early and in conjunction with atropine.

ENVIRONMENTAL HAZARDS:

This product is toxic to fish. Do not apply where runoff is likely to occur. Do not apply directly to water, or to areas where the surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

Do not apply when weather conditions favor drift from the treated areas.

DIRECTIONS FOR USE

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, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes, ornamental gardens or parks, or on golf courses, or lawns and grounds.

STORAGE AND DISPOSAL

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

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.

GENERAL USE PRECAUTIONS:

- Read all directions before using this product.
- BETASAN 12.5-G should be used only for EPA-registered sites and at recommended use rates.
- Do not allow children or pets on treated lawns until this product has been watered into the soil, and the grass is completely dry.
- BETASAN 12.5-G is recommended for use on mineral soils only.
- Do not apply peat moss to lawns, groundcovers, or established ornamentals before treating with BETASAN 12.5-G.

PRODUCT INFORMATION:

BETASAN 12.5-G is recommended for use on home lawns, parks, and golf courses, on ornamental plants, and on groundcovers 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 12.5-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 12.5-G.

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

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, using the recommended 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 12.5-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.

Dichondra Lawns: BETASAN 12.5-G can be applied to dichondra lawns at the time of seeding or anytime thereafter.

Established Ornamentals and Groundcovers: BETASAN 12.5-G should be applied only to the following well established plants:

Herbaceous plants: Alyssum Aster, Bachelor's Button, Calendula, Candytuft, Coral Bell, Daisy, Marigold, Pansy, Primrose, Stock, Sweet Pea, and Wallflower.

Groundcovers: Ajuga, Campanula, Gazania, Hypericum, Ice Plant, Ivy, Pachysandra, Periwinkle, Sedum, and Wild Strawberry.

Deciduous trees, shrubs, and evergreens: Abelia, Azalea, Azara, Boxwood, Daphne, Holly, Juniper, Monterey Cypress, Monterey Pine, Myrtle, Privet, Pyracantha, Sandankwa, Star Jasmine, Tobira, and Xylosma.

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 12.5-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 12.5-G at the recommended rate should be made 4 - 5 months after the initial application.

BETASAN 12.5-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 200 pounds BETASAN 12.5-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 4.6 pounds of BETASAN 12.5-G per 1000 sq. ft. per year.

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

Crabgrass only: Apply uniformly 80 pounds of BETASAN 12.5-G per acre. Or, apply 1.8 pounds of BETASAN 12.5-G per 1000 sq. ft.

Annual Bluegrass, Goosegrass, and Other Annual Weeds: Apply uniformly 100 pounds of BETASAN 12.5-G per acre. Or, apply 2.3 pounds of BETASAN 12.5-G per 1000 sq. ft.

Application rates per acre recommended for BETASAN 12.5-G.

Application Schedule	Amounts of product	
	Crabgrass only	Annual bluegrass, barnyardgrass, fall panicum, foxtails, and other annual weeds
Single application	80	100
Sequential applications	80	100

Application rates per 1000 sq. ft. recommended for BETASAN 12.5-G.

Application Schedule	Amounts of product	
	Crabgrass only	Annual bluegrass, barnyardgrass, fall panicum, foxtails, and other annual weeds.
Single application	1.8	2.3
Sequential applications	1.8	2.3

Sprinkle or irrigate the treated area with water for 10 -15 minutes after application to wash the BETASAN 12.5-G into the soil.

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	80	1.8	2.6	2.3	6½ ft.
	100	2.3	2.8	2.5	6½ ft.
Scott's	100	2.3	3.5	2.5	
Central #1615A	100	2.3	4	3	
Central #1665	100	2.3	5½	4½	

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 12.5-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 in 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.