

10163-199

03/29/2011

1/4



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Washington, D.C. 20460

OFFICE OF  
CHEMICAL SAFETY AND  
POLLUTION PREVENTION

MAR 29 2011

Krystal Hengl  
Gowan Company  
P.O. Box 5569  
Yuma, AZ 85366-5569

Subject: Label Amendment (delete residential uses)  
Betasan 3.6G  
EPA Reg. No. 10163-199  
Application Dated July 2, 2010  
Resubmission Dated March 9, 2011

Dear Ms. Hengl:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

A stamped copy of your label is enclosed for your records. This label supersedes all previously accepted labels. You must submit one (1) copy of the final printed label before you release the product for shipment. Products shipped after eighteen (18) months from the date of this letter or the next printing of the label, whichever occurs first, must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions.

If you have any questions, please contact Mindy Ondish at (703) 605-0723 or at [ondish.mindy@epa.gov](mailto:ondish.mindy@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Kable Bo Davis", with a long horizontal flourish extending to the right.

Kable Bo Davis  
Product Manager 25  
Herbicide Branch  
Registration Division (7505P)

2/4

# Betasan<sup>TM</sup> 3.6 G

A Selective Herbicide for Preemergence Control of Crabgrass and Annual Bluegrass in Golf Course Turf

<b>ACTIVE INGREDIENT:</b> Bensulide	<b>% By Wt.</b>
S-(O,O-diisopropyl phosphorodithioate) ester of N-(2-mercaptoethyl) benzenesulfonamide	3.6%
<b>OTHER INGREDIENTS</b>	<b>96.4%</b>
	<b>TOTAL 100.0%</b>

Contains 3.6 pounds of active ingredient per 100 pounds

## KEEP OUT OF REACH OF CHILDREN CAUTION

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed. Avoid breathing dust. Causes moderate eye irritation. Do not get in eyes, on skin, or on clothing. Wash all contaminated clothing with soap and hot water before re-use. Avoid contamination of food, feed and water supplies

FIRST AID	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
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 <b>1-888-478-0798</b> for emergency medical treatment information.	
NOTE TO PHYSICIAN	
This product is an organophosphate herbicide. 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.	

### 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  $\geq$  14 mil.
- Chemical resistant footwear plus socks
- Protective eyewear
- In addition to the above, for-hire applicators (golf course and non-golf course employees) must wear a NIOSH-approved non-powered air purifying respirator equipped with an N, R, or P filter.

#### All other applicators and handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or viton  $\geq$  14 mil.
- Shoes plus socks
- A NIOSH approved respirator with any N, R, P or HE filter
- In addition to the above, for-hire applicators (golf course and non-golf course employees) must wear a NIOSH-approved non-powered air purifying respirator equipped with an N, R, or P filter.

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: 10163-199  
EPA Est. No: 7401-TX-1

Gowan Company  
P.O. Box 5569  
Yuma, AZ 85366-5569

**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 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.

**DIRECTIONS FOR USE**

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

**USE RESTRICTIONS**

**IMPORTANT: THIS PRODUCT WILL NOT WORK UNLESS IT IS WATERED IN FOR 10-15 MINUTES. 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.**

**WATERING-IN MUST BE PERFORMED BY THE COMMERCIAL APPLICATOR.**

- Do not apply this product in a way that will contact workers or other persons.
- Keep unprotected persons out of treated areas until grass is completely dry.
- For use only on golf courses (greens, tees and bentgrass fairways only).
- Do not use on parks, recreational areas, or other public sites.
- Applications on bentgrass fairways are limited to the 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.
- This product may only be applied by tractor drawn spreader or by push-type spreader.
- Hand-held rotary broadcast spreaders are prohibited.
- Application of Betasan must precede emergence of weeds from the soil. Crabgrass will emerge from the soil from four to six weeks before it is visible above lawn sod. If weeds are visible above the soil, it is too late to apply Betasan.
- Remove leaves, dead or tall grass, and other debris before applying Betasan to turf areas. Any weeds present must be removed or worked into the soil before applying Betasan.
- **DO NOT APPLY PEAT MOSS TO TURF BEFORE TREATING WITH BETASAN.**

**PRODUCT INFORMATION**

Betasan is for use on golf course turf for control of crabgrass, annual bluegrass, and other annual weeds listed above.

**WEEDS CONTROLLED**

- Smooth Crabgrass (*Digitaria ischaemum*)
- Hairy Crabgrass (*Digitaria sanguinalis*)
- Redroot Pigweed (*Amaranthus retroflexus*)
- Barnyardgrass (*Echinochloa spp.*)  
(Watergrass)
- Lambsquarters (*Chenopodium album*)
- Goosegrass (*Eleusine indica*)
- Annual Bluegrass (*Poa annua*)
- Shepherdspurse (*Capsella bursa-pastoris*)
- Deadnettle (Henbit) (*Lamium spp.*)

**TIMING OF APPLICATION**

**Turf Grasses:** Apply Betasan to well established golf course turf only. Betasan can be used on the following established turf grasses:

Bahia	Centipede	Poa Trivialis
Bentgrass spp.	Fescue spp.	Saint Augustine
Bermudagrass spp.	Pensacola Bahia	Red Top
Perennial Bluegrass spp.	Perennial Ryegrass	Zoysia

For control of crabgrass, apply Betasan at specified rate (see **APPLICATION INSTRUCTIONS**) 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 crabgrass emergence.

For control of annual bluegrass and other annual weeds, apply Betasan at the specified rate (see **APPLICATION INSTRUCTIONS**) before the weeds emerge from the soil.

In southern or western states where germination of crabgrass, annual bluegrass, and other weeds extends into the late summer and early fall, a second application of Betasan at the specified rates should be made four to five months after the initial application.

Betasan should be applied with a push type spreader that will give uniform coverage. A more uniform application can be made by spreading half the required amount of Betasan over the area to be treated, then applying the remainder at right angles or crosswise. Avoid misses by

overlapping slightly. Water this product in for 10 to 15 minutes after application to wash the Betasan down into the soil where the weed seeds are located.

Consult weed specialists of the State Agricultural Experiment Station or the State Agricultural Extension Service for additional information, as the timing and rate of application needed will vary with local conditions.

**APPLICATION INSTRUCTIONS**

**Crabgrass Only:** Apply 12 pounds of Betasan 3.6G uniformly over 2,500 square feet.

**Annual Bluegrass and Other Annual Weeds:** Apply 20 pounds of Betasan 3.6G uniformly on 2,500 square feet.

**RESEEDING**

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

The following procedures are suggested in order to minimize any stunting of turf grasses which may occur when reseeding into Betasan-treated areas:

1. Do not reseed within 4 months after application.
2. Renovate the area to be reseeded by raking thoroughly to scarify the soil surface. Where practical, mix peat in with the soil to provide an optimum seed bed.
3. When turf diseases or physiological disorders necessitate reseeding sooner than 4 months after Betasan application, apply powdered activated charcoal prior to reseeding to deactivate the Betasan. Apply the activated charcoal at a rate of 7 pounds per 1,000 square feet in 14 gallons of water per 1,000 square feet (300 pounds per acre in 600 gallons of water per acre). Following application, irrigate the turf with sufficient water to wash the charcoal into the soil. 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, well-ventilated area away from food or feed.

**PESTICIDE DISPOSAL:** Pesticide or equipment rinsate that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container.** Completely empty bag by shaking and tapping sides and bottom to loosen clinging particles into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or burn if allowed by state and local authorities. Stay out of smoke during burning.

**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 LIABILITY LIMITATIONS**

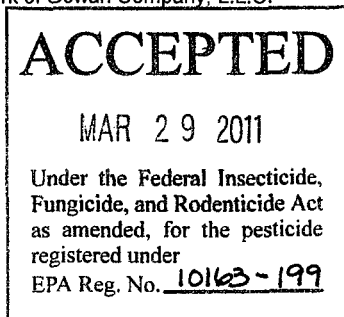
Important: Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product. If terms are not acceptable return the unopened container for a full refund.

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

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, GOWAN COMPANY'S EXCLUSIVE LIABILITY FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, OR ANY OTHER LEGAL THEORY IS STRICTLY LIMITED TO THE PURCHASE PRICE PAID OR REPLACEMENT OF PRODUCT, AT GOWAN COMPANY'S SOLE DISCRETION.

BETASAN™ is a trademark of Gowan Company, L.L.C.



EPA Text Pending: Betasan 3.5G (resent to EPA 3-9-11)