

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND  
DOMESTIC ANIMALS**

**CAUTION:**

- Harmful if swallowed or absorbed through the skin
- Avoid breathing spray mist
- Causes moderate eye irritation. Do not get in eyes, on skin, or on clothing.
- Wash thoroughly after handling and before eating or smoking
- Wash all contaminated clothing with soap and hot water before re-use
- Avoid contamination of food, feed, or water supplies

**ENVIRONMENTAL HAZARDS**

- This product is toxic to fish. Do not apply directly to any body of water. Do not contaminate water by cleaning of equipment or disposal of wastes
- Do not apply when weather conditions favor drift from area treated

**PHYSICAL HAZARDS**

- Combustible. Do not use where point of spill near heat or open flame. Keep container closed when not in use

**DIRECTIONS FOR USE**

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

**GENERAL USE PRECAUTIONS**

- READ ALL DIRECTIONS BEFORE USING
- MIX WELL BEFORE DILUTING WITH WATER
- BETASAN 4-E should be used only for recommended uses and at recommended rates.
- Clean-up spills on walks or patios by covering with dry soil or absorbent material. Bury sweepings and hose area.
- Do not allow children or pets on treated lawns until grass is completely dry
- BETASAN 4-E is recommended for use on mineral soils only
- Do not apply peat moss to lawn, ground covers, or established ornamentals before treating with BETASAN 4-E

**PRODUCT INFORMATION**

BETASAN 4-E is recommended for use on home lawns, parks and golf courses, on ornamental plants and on ground covers for control of crabgrass, annual bluegrass and other annual weeds listed. Application of BETASAN 4-E must precede emergence of weeds from the soil. Crabgrass will emerge from the soil from 4 to 6 weeks before it is visible above lawn sod. If weeds are visible above the soil, it is too late to apply BETASAN 4-E. Remove leaves, dead fall grass, and other debris before applying BETASAN 4-E to turf areas. Any weeds present around ornamentals must be removed or worked into the soil before applying BETASAN 4-E

**WEEDS CONTROLLED**

- |  |   |
|--|---|
| Annual Bluegrass ( <i>Poa annua</i> )                          | Hairy Crabgrass ( <i>Digitaria sanguinalis</i> )  |
| Barnyardgrass ( <i>Watergrass</i> ) ( <i>Echinochloa</i> spp.) | Lambquarters ( <i>Chenopodium album</i> )         |
| Deadnettle (Henbit) ( <i>Lamium</i> spp.)                      | Redroot Pigweed ( <i>Amaranthus retroflexus</i> ) |
| Fall Panicum ( <i>Panicum dichotomiflorum</i> )                | Shepherdspurse ( <i>Capsella bursa-pastoris</i> ) |
| Foxtails ( <i>Setaria</i> spp.)                                | Smooth Crabgrass ( <i>Digitaria ischaemum</i> )   |
| Goosegrass ( <i>Elymus indicus</i> )                           |   |

**TIMING OF APPLICATION**

The most effective program for control of crabgrass, goosegrass, annual bluegrass and other annual weeds is one specifically designed for local conditions. Two or more applications per year may be necessary, using the recommended rates given below 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 4-E should be applied only to well established grass lawns. It can be used on the following established turf grasses:

- |                         |                    |                 |
|-------------------------|--------------------|-----------------|
| Alyssum                 | Centipede          | Poa trivialis   |
| Bahia                   | Fescue spp         | Saint Augustine |
| Bentgrass spp           | Penascola Bahia    | Red Top         |
| Perennial Bluegrass spp | Perennial Ryegrass | Zoysia          |
| Bermudagrass spp        |                    |                 |

**DICHONDRA LAWNS:** BETASAN 4-E can be applied to dichondra lawns at the time of seeding or any time thereafter.

**ORNAMENTALS AND GROUND COVERS:** BETASAN 4-E should be applied only to the following well established ornamentals and ground covers:

- |                   |            |             |
|-------------------|------------|-------------|
| Aster             | Coral Bell | Stock       |
| Bachelor's Button | Daisy      | Sweet Pea   |
| Calendula         | Marigold   | Wall Flower |
| Candy-tuft        | Penny      | Zinnia      |
| Daffodil          | Primrose   | Ranunculus  |
| Dahlia            | Gladiolus  | Tulip       |
| Freesia           | Narcissus  | Cyclacanth  |
|                   | Juniper    | Sandanku    |

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# Betasan® 4-E

**EMULSIFIABLE LIQUID**

**Selective Herbicide for Pre-Emergence Control of Crabgrass and Annual Bluegrass in Turf, Ornamentals, and Ground Covers. ONLY FOR SALE TO, USE, AND STORAGE BY SERVICEPERSONS.**

**ACTIVE INGREDIENT:**

Bensulfide, S-(2,0-Diisopropyl phosphorodithioate) ester of N-(2-mercaptoethyl) benzenesulfonamide

**INERT INGREDIENTS:**

46.0%  
54.0%  
100.0%

Contains 4 pounds of active ingredient per gallon.

**Keep Out of Reach of Children**

**CAUTION**

**STATEMENT OF PRACTICAL TREATMENT**

**Call a Physician Immediately!** If a known exposure occurs or if poisoning is suspected, do not wait for symptoms to develop. Immediately initiate the recommended procedures described below and simultaneously contact a physician, the nearest hospital or a Poison Control Center, or call collect, day or night:

(203) 226-6602 OR (800) 424-9300  
STAUFFER CHEMICAL COMPANY PESTICIDE TEAM SAFETY NETWORK

Inform the person contacted of the type and extent of exposure, describe the victim's symptoms and follow the advice given.

**NOTE: Be sure to advise the person contacted that the active ingredient in this compound is a cholinesterase inhibitor and follow the advice given.**

**NOTE TO PHYSICIAN:** Exposure to the active ingredient may cause cholinesterase inhibition. Atropine by injection is antidotal. 2-PAM is also antidotal when administered early and in conjunction with atropine.

**If swallowed:** Do not induce vomiting. Immediately call a physician or Poison Control Center. Give large quantities of water and get medical attention. If vomiting occurs, give fluids again. Never give anything by mouth to an unconscious person.

**If inhaled:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen, preferably with a physician's advice.

**If on skin:** Flush with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation occurs. Wash clothing before re-use.

**If in eyes:** Hold eyelids apart and flush eyes with large amounts of running water for at least 15 minutes. Get medical attention if irritation persists.

**SEE LEFT PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS**

This product is sold only for uses stated on its label. No express or implied license is granted to use or sell this product under any patent in any country except as specified: Country, United States of America Patent No. 3,205,253

BETASAN® is a registered trademark of Stauffer Chemical Company.

EPA Reg. No. 476-1817

EPA Est. 476-NJ-1

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Made in U.S.A. by



**STAUFFER CHEMICAL COMPANY**

WESTPORT, CT 06881-0850

WT 5-82

**ACCEPTED**

**JUL 20 1982**

Underwritten and Insecticide, Fungicide and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 476-1817

Abutilon  
Azalea  
Azara  
Boxwood  
Daphne  
Holly  
Aurea  
Campanula  
Guzmania

Monterey Cypress  
Monterey Pine  
Myrtle  
Privet  
Hypericum  
Ice Plant  
Ivy  
Pachysandra

Star Jasmine  
Tobira  
Xylocoma  
Periwinkle  
Sedum  
Wild Strawberry

For control of crabgrass, apply BETASAN 4-E at the recommended rate (see RATES OF APPLICATION) any time from fall (September or October) through early spring for spring and summer control. With a late winter or an early spring application, the application must be made prior to crabgrass emergence (see PRODUCT INFORMATION).

For control of annual bluegrass and other annual weeds, apply BETASAN 4-E at the recommended rate (see RATES OF APPLICATION) before weeds emerge from the soil. Where germination of crabgrass, annual bluegrass and other annual weeds extends into the late summer and early fall, a second application of BETASAN 4-E at the recommended rates should be made 4 to 5 months after the initial application.

BETASAN 4-E should be applied with spray equipment that will provide uniform application such as a backpack sprayer, hose proportionator, or pressure sprayer.

**RATES OF APPLICATION**

Apply a maximum of 4.0 gallons (160 pints) of BETASAN 4-E per acre (100 fluid ounces per 1,000 square feet) per year in two or more applications depending on the weed species and degree of infestation.

If weed populations are unmanageable to provide specific, local recommendations, follow these three steps:

**CRABGRASS ONLY:** Apply 1 1/2 gallons (15 pints) to 2 1/2 gallons (20 pints) of BETASAN 4-E in 80 to 100 gallons of water uniformly on one acre (5.6 to 7.3 fluid ounces per 1,000 square feet). Rate of Application for the John Deere Liquid Applicator: Use 22 to 29 fluid ounces in 2 1/2 gallons of water and apply to 4,000 square feet of lawn. Water thoroughly after application.

**ANNUAL BLUEGRASS AND OTHER ANNUAL WEEDS:** Apply 3 1/2 gallons of BETASAN 4-E in 80 to 100 gallons of water uniformly on one acre (9.4 fluid ounces per 1,000 square feet).

When a weed control program involves two to three applications of BETASAN for crabgrass, goosegrass and bluegrass, the rate of application for goosegrass and annual bluegrass may be reduced to 1 1/2 gallons (15 pints) to 2 1/2 gallons (20 pints) per acre (5.6 to 7.3 fluid ounces per 1,000 square feet), using the higher rate for heavier infestations.

**RESEEDING**

Any material that provides effective control of annual grasses may affect new lawn 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 4-E application, apply powdered activated charcoal prior to reseeding to deactivate the BETASAN 4-E. Apply the activated charcoal at a rate of 7 pounds in 14 gallons of water per 1,000 square feet (300 pounds 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.
- STORAGE:** Protect from temperatures below 42° F. Product crystallizes at lower temperatures. Warm or store at higher temperatures and mix to redissolve crystals and ensure uniformity before use. Do not store near sources of heat or open flame.
- PESTICIDE DISPOSAL:** Pesticide spray mixture, or rinse water that cannot be used according to label instructions must be disposed of according to applicable Federal, State, or local procedures.
- CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other approved State and local procedures.

**NOTICE—READ CAREFULLY**

**CONDITIONS OF SALE:** Stauffer (and seller) offers this product for sale subject to, and buyer and all users are deemed to have accepted, the following conditions of sale and warranty which may only be varied by written agreement of a duly authorized representative of Stauffer.

**WARRANTY LIMITATION:** Stauffer warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the directions for use on the label subject to the inherent risks referred to below. Stauffer makes no other express warranties. THERE IS NO IMPLIED WARRANTY OF MERCHANTABILITY and there are no warranties which extend beyond the description on the label hereof.

**INHERENT RISKS:** The directions for use of this product are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks associated with use. Buyer assumes all risks associated with use or application of this product contrary to label instructions or resulting from extraordinary weather conditions.

**LIMITATION OF LIABILITY:** In no case shall Stauffer be liable for special, indirect or consequential damages resulting from the use or handling of this product and no claim of any kind shall be greater in amount than the purchase price of the product in respect of which such damages are claimed.

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