

PM-25

476-1817

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(Stauffer Shield)

BETASAN® 4-E  
Emulsifiable Liquid

Selective Herbicide for Pre-Emergence Control of Crabgrass and Annual Bluegrass In Turf, Ornamentals, and Ground Covers.

ACTIVE INGREDIENT:

Bensulide: S-(0,0-Diisopropyl phosphorodithioate) ester of N-(2-mercaptoethyl)benzenesulfonamide. . . 46.0%

INERT INGREDIENTS: . . . . . 54.0%  
100.0%

ACCEPTED

Contains 4 Pounds Of Active Ingredient Per Gallon.

SEP 10 1987

KEEP OUT OF REACH OF CHILDREN

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

CAUTION

STATEMENT OF PRACTICAL TREATMENT

If a known exposure occurs or is suspected, immediately start the procedures given below and simultaneously contact a Poison Center, a physician, or the nearest hospital or call collect, day or night, (203) 226-6602 Stauffer Chemical Company or (800) 424-9300 Pesticide Team Safety Network.

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.

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

IF SWALLOWED, immediately give several glasses of water but do not induce vomiting. If vomiting does occur, give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

FOR SKIN CONTACT, flush all affected areas with plenty of water for several minutes. Remove and clean contaminated clothing and shoes. Seek medical attention if irritation occurs.

FOR EYE CONTACT, 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 lids with water. Get medical attention immediately.

IF INHALLED, remove to fresh air. Seek medical attention if respiratory irritation occurs or if breathing becomes difficult.

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

EPA Reg. No. 476-1817  
EPA Est.

Gal. Net Litres

RS-870807

Made in U.S.A. by  
STAUFFER CHEMICAL COMPANY  
WESTPORT, CT. 06881-0850

(LEFT PANEL)

PRECAUTIONARY STATEMENTSHAZARDS TO HUMANS AND DOMESTIC ANIMALSCAUTION:

- 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, store, pour, or spill near heat or open flame. Keep container closed when not in use.

STORAGE AND DISPOSAL

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

STORAGE: Protect from temperatures below 42°F. At temperatures below 42°F, product may crystallize. Dissolve crystals with quiet storage at warm temperatures (75°F). Redissolution rate: 40°-48°F (40-60days); or 60°F (1-3 weeks); 70°-80°F (1-3 days). Roll container and agitate contents to provide a uniform product prior to use.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

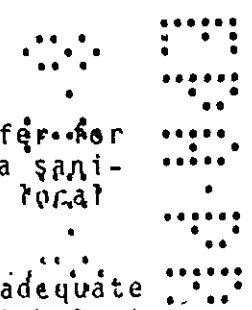
CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

SPILL OR LEAK: Small spills can be handled routinely. Use adequate ventilation and wear an air-supplied respirator to prevent inhalation. Wear suitable protective clothing to prevent skin and eye contact. Use the following procedures:

1. Spread a suitable absorbent such as clay, sawdust or kitty litter on the spilled material.
2. Place sweepings in an appropriate chemical waste container.

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Alternate STORAGE & DISPOSAL for GREENSWEEP® HOUSEHOLD PRODUCTS

BETASAN 4-E

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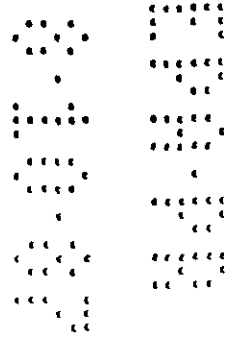
STORAGE AND DISPOSAL

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

STORAGE: Protect from temperatures below 42°F. At temperatures below 42°F, product may crystalize. Dissolve crystals with quiet storage at warm temperatures (75°F). Redissolution rate: 40°-48°F (40-60days); or 60°F (1-3 weeks); 70°-80°F (1-3 days). Roll container and agitate contents to provide a uniform product prior to use.

CONTAINER DISPOSAL: Securely wrap original container, including any unused product, in several layers of newspaper and discard in trash.

SPILL OR LEAK: Small spills can be handled routinely. Use adequate ventilation to prevent inhalation. Wear suitable protective clothing to prevent skin and eye contact. Spread a suitable absorbent such as clay, sawdust or kitty litter on the spilled material. Sweep up absorbed material and wrap in several layers of newspaper and discard in trash. Using common household detergent, scrub spilled area with a stiff brush and small amounts of water. Flush the area with water.



3. Generously cover the contaminated areas with a common household detergent. Using a stiff brush and small amounts of water, work the detergent into the spill material forming a slurry. Do not splatter on one's self or bystanders and completely avoid skin or eye contact with this material. Brush the slurry into cracks and crevices and allow to stand for 2-3 minute .
4. Spread absorbents on the slurried liquid and shovel the absorbed material into the container.
5. Repeat if necessary.
6. Flush the area with water while observing proper environmental considerations.
7. Seal container and dispose of in approved pesticide landfill.

Large spills should be handled according to a predetermined plan. For assistance in developing a plan, contact the Agricultural Chemical Division, Stauffer Chemical Company, Westport, CT 06881-0850.

#### 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.
- . 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 tall 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.

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WEEDS CONTROLLED

Annual Bluegrass (Poa annua)  
 Barnyardgrass (Watergrass) (Echinochloa spp.)  
 Deadnettle (Henbit) (Lamium spp.)  
 Fall Panicum (Panicum dichotomiflorum)  
 Foxtails (Setaria spp.)  
 Goosegrass (Eleusine indica)

Hairy Crabgrass (Digitaria sanguinalis)  
 Lambsquarters (Chenopodium album)  
 Redroot Pigweed (Amaranthus retroflexus)  
 Shepherdspurse (Capsella bursa-pastoris)  
 Smooth Crabgrass (Digitaria ischaemum)

DIRECTIONS FOR USE

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

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:

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

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:

Alyssum	Coral Bell	Stock
Aster	Daisy	Sweet Pea
Bachelor's-Button	Marigold	Wall Flower
Calendula	Pansy	Zinnia
Candy-tuft	Primrose	Ranunculus
Daffodil	Gladiolus	Tulip
Dahlia	Narcissus	Pyracantha

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Freesia	Juniper	Sandankwa
Abelia	Monterey Cypress	Star Jasmine
Azalea	Monterey Pine	Tobira
Azara	Myrtle	Xylosma
Boxwood	Privet	Periwinkle
Daphne	Hypericum	Sedum
Holly	Ice Plant	Wild Strawberry
Ajuga	Ivy	
Campanula	Pachysandra	
Gazania		

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 knapsack sprayer, hose proportioner, or pressure sprayer.

RATES OF APPLICATION

Apply a maximum of 6-1/4 gallons (50 pints) of BETASAN 4-E per acre (18 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 specialists are unavailable to provide specific local recommendations, follow these directions:

CRABGRASS ONLY: Apply 1-7/8 gallons (15 pints) to 2.5 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 Doe 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 3-1/8 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).

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Alternate RATES OF APPLICATION for GREENSWEEP® HOUSEHOLD PRODUCTS

BETASAN 4-E

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RATES OF APPLICATION

For Crabgrass control only: Apply one quart per 5000 sq. ft.  
Marks on side of bottle indicate square feet covered in 1000's.

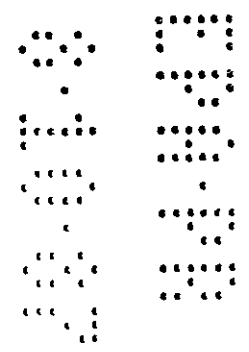
For Annual Bluegrass and other annual weeds: Apply one quart per 3500 sq. ft. Marks on side of bottle indicate square feet covered in 700's.

When a weed control program involves two or three applications of GREENSWEEP® Spray-On Liquid Pre-emergence Crabgrass Preventer for crabgrass, goosegrass and bluegrass, the rate of application for goosegrass and annual bluegrass may be reduced to one quart per 5000 square feet.

HOW TO APPLY

Shake well before applying

- Connect spray nozzle to hose.
- Remove bottle cap, and screw bottle onto nozzle.
- Turn the on/off switch on top of the nozzle right or left to OFF.
- Turn on the water at the tap.
- When ready to treat, turn the on/off switch to its center ON position. The water mixes automatically with the product at the proper ratio.
- Walk and spray at a steady pace.



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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 1-7/8,, gallons (15 pints) to 2.5 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.

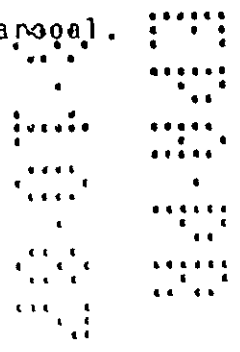
The following procedures are suggested in order to minimize any stunting of turf grasses which may occur when reseeding into BETASAN-treated areas:

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.





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NOTICE - READ CAREFULLY

CONDITIONS OF SALE: Stauffer (and seller) offer(s) 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.

