

476-1817

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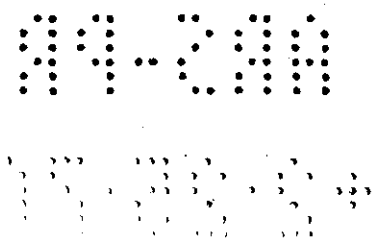
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**ACCEPTED**

JUN 19 1970

UNDER THE FEDERAL INSECTICIDE  
FUNGICIDE AND RODENTICIDE ACT  
FOR ECONOMIC POISON REGISTERED  
ED UNDER NO. ~~476-1817~~ SUBJECT  
TO ATTACHED COMMENTS.

(STAUFFER SHIELD)



BETASAN<sup>®</sup> 4E

A SELECTIVE HERBICIDE FOR PRE-EMERGENCE CONTROL OF CRABGRASS AND ANNUAL BLUEGRASS IN TURF, ORNAMENTALS AND GROUND COVERS

CONTAINS 4 POUNDS ACTIVE INGREDIENT PER GALLON

ACTIVE INGREDIENT

S-(O,O-DIISOPROPYL PHOSPHORODITHIOATE) OF	
N-(2-MERCAPTOETHYL) BENZENESULFONAMIDE .....	46.08
<u>INERT INGREDIENTS:</u> .....	<u>53.92</u>
	100.00%

U.S. PATENT NO. 3,205,253

C A U T I O N

KEEP OUT OF REACH OF CHILDREN

HARMFUL IF SWALLOWED.  
AVOID PROLONGED OR REPEATED CONTACT WITH THE SKIN.  
AVOID CONTACT WITH THE EYES,  
AVOID CONTAMINATION OF FOOD AND FEED, DRINKING  
WATER, AND FISH PONDS.

DO NOT USE OR STORE NEAR HEAT OR OPEN FLAME

PROTECT FROM TEMPERATURES BELOW 42<sup>0</sup> F. PRODUCT CRYSTALLIZES AT LOWER  
TEMPERATURES. WARM OR STORE AT HIGHER TEMPERATURES, AND MIX TO  
RE-DISSOLVE CRYSTALS AND ASSURE UNIFORMITY BEFORE USE.

READ ALL DIRECTIONS BEFORE USING

MADE IN U.S.A.

STAUFFER CHEMICAL COMPANY

NEW YORK, N.Y. 10017

## WEEDS CONTROLLED

SMOOTH CRABGRASS (DIGITARIA ISCHAEMUM)  
 HAIRY CRABGRASS (DIGITARIA SANGUINALIS)  
 REDROOT PIGWEED (AMARANTHUS RETROFLEXUS)  
 BARNYARDGRASS (WATERGRASS) (ECHINOCHLOA SPP.)  
 LAMBSQUARTERS (CHENOPODIUM ALBUM)  
 GOOSEGRASS (ELEUSINE INDICA)  
 ANNUAL BLUEGRASS (POA ANNUA)  
 SHEPHERDSPURSE (CAPSELLA BURSA-PASTORIS)  
 DEADNETTLE (HENBIT) (LAMIUM SPP.)

## GENERAL USE PRECAUTIONS

BETASAN 4E SHOULD BE USED ONLY FOR RECOMMENDED USES AND AT RECOMMENDED RATES. APPLY WHEN THERE IS LITTLE OR NO WIND TO AVOID DRIFT. CLEAN UP SPILLS ON WALKS OR PATIOS BY COVERING WITH DRY SOIL OR ABSORPTIVE MATERIAL. BURY SWEEPINGS AND HOSE AREA. RINSE EQUIPMENT AND CONTAINERS AND DISPOSE OF WASTES BY BURYING IN NON-CROP LANDS AWAY FROM WATER SUPPLIES. DISPOSE OF CONTAINER BY CRUSHING IT AND BURYING IT WITH WASTES. DO NOT ALLOW CHILDREN OR PETS ON TREATED LAWNS UNTIL BETASAN 4E HAS BEEN WATERED INTO THE SOIL AND GRASS IS COMPLETELY DRY. AVOID CONTAMINATION OF FOOD AND FEED.

TOXIC TO FISH. DO NOT CONTAMINATE ANY BODY OF WATER BY DIRECT APPLICATION. CLEANING OF EQUIPMENT OR DISPOSAL OF WASTES AND CONTAINERS.

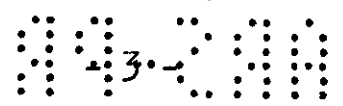
## PRODUCT INFORMATION

BETASAN 4E 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.

## DIRECTIONS FOR APPLICATION

APPLICATION OF BETASAN 4E 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 4E. REMOVE LEAVES, DEAD TALL GRASS, AND THE DEBRIS BEFORE APPLYING BETASAN 4E TO TURF AREAS. ANY WEEDS PRESENT AROUND ORNAMENTALS MUST BE REMOVED OR WORKED INTO THE SOIL BEFORE APPLYING BETASAN 4E. BETASAN 4E IS RECOMMENDED FOR USE ON MINERAL SOILS ONLY. DO NOT APPLY PEAT MOSS TO LAWN, GROUND COVERS OR ESTABLISHED ORNAMENTALS BEFORE TREATING WITH BETASAN 4E.

BETASAN 4E



TIMING OF APPLICATION -- GENERAL COMMENTS

GRASS LAWNS: BETASAN 4E SHOULD BE APPLIED ONLY TO WELL ESTABLISHED GRASS LAWNS. BETASAN 4E CAN BE USED ON THE FOLLOWING ESTABLISHED TURF GRASSES.

- |                          |                    |                 |
|--------------------------|--------------------|-----------------|
| BAHIA                    | CENTPEDE           | POA TRIVIALIS   |
| BENTGRASS SPP.           | FESCUE SPP.        | SAINT AUGUSTINE |
| BERMUDAGRASS             | PENSACOLA          | RED TOP         |
| PERENNIAL BLUEGRASS SPP. | PERENNIAL RYEGRASS | ZOYSIA          |

DICHONDRA LAWNS: BETASAN 4E CAN BE APPLIED TO DICHONDRA LAWNS AT THE TIME OF SEEDING OR ANY TIME THEREAFTER.

ORNAMENTALS AND GROUND COVERS: BETASAN 4E SHOULD BE APPLIED ONLY TO THE FOLLOWING ORNAMENTALS AND GROUND COVERS:

- |                   |                  |                 |
|-------------------|------------------|-----------------|
| ALYSSUM           | CORAL BELL       | STOCK           |
| ASTER             | DAISY            | SWEET PEA       |
| BACHELOR'S-BUTTON | MARIGOLD         | WALL FLOWER     |
| CALENDULA         | PANSY            | ZINNIA          |
| CANDY-TUFT        | PRIMROSE         |                 |
| DAFFODIL          | GLADIOLUS        | RANUNCULUS      |
| DAHLIA            | NARCISSUS        | TULIP           |
| FREESIA           |                  |                 |
| ABELIA            | JUNIPER          | PYRACANTHA      |
| AZALEA            | MONTEREY CYPRESS | SANDANKWA       |
| AZARA             | MONTEREY PINE    | STAR JASMINE    |
| BOXWOOD           | MYRTLE           | TOBIRA          |
| DAPHNE            | PRIVET           | XYLOSMA         |
| HOLLY             |                  |                 |
| AJUGA             | HYPERICUM        | PERIWINKLE      |
| CAMPANULA         | ICE PLANT        | SEDUM           |
| GAZANIA           | IVY              | WILD STRAWBERRY |
|                   | PACHYSANDRA      |                 |

FOR CONTROL OF CRABGRASS, APPLY BETASAN 4E 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 "DIRECTIONS FOR APPLICATION").

FOR CONTROL OF ANNUAL BLUEGRASS AND OTHER ANNUAL WEEDS, APPLY BETASAN 4E AT THE RECOMMENDED RATE (SEE "RATES OF APPLICATION") BEFORE THE WEEDS EMERGE FROM THE SOIL. CONSULT WEED SPECIALISTS OF THE STATE AGRICULTURAL EXTENSION SERVICE OR THE STATE AGRICULTURAL EXPERIMENT STATIONS FOR ADDITIONAL INFORMATION, AS THE TIMING AND RATE OF APPLICATION NEEDED WILL VARY WITH LOCAL CONDITIONS.

IN SOUTHERN OR WESTERN STATES WHERE GERMINATION OF CRABGRASS, ANNUAL BLUEGRASS AND OTHER ANNUAL WEEDS EXTENDS INTO THE LATE SUMMER AND EARLY FALL, A SECOND APPLICATION OF BETASAN 4E AT THE RECOMMENDED RATES SHOULD BE MADE FOUR TO FIVE MONTHS AFTER THE INITIAL APPLICATION.

BETASAN 4E SHOULD BE APPLIED WITH SPRAY EQUIPMENT THAT WILL PROVIDE UNIFORM APPLICATION SUCH AS A KNAPSACK SPRAYER, HOSE PROPORTIONER, OR PRESSURE SPRAYER.

SPRINKLE WITH WATER FOR 10 TO 15 MINUTES AFTER APPLICATION TO WASH THE BETASAN 4E OFF THE GRASS AND DOWN INTO THE SOIL WHERE THE WEED SEEDS ARE LOCATED.

### RATES OF APPLICATION

CRABGRASS: APPLY 2-1/2 GALLONS OF BETASAN 4E IN 80 TO 100 GALLONS OF WATER UNIFORMLY ON ONE ACRE (7.4 FL. OZ. PER 1,000 SQ. FEET).

ANNUAL BLUEGRASS AND OTHER ANNUAL WEEDS: APPLY 3-1/8 GALLONS OF BETASAN 4E IN 80 TO 100 GALLONS OF WATER UNIFORMLY ON ONE ACRE (9.4 FL. OZ. PER 1,000 SQ. FEET).

### RE-SEEDING

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 RE-SEEDING INTO BETASAN-TREATED AREAS:

- (1) DO NOT RE-SEED WITHIN FOUR MONTHS AFTER APPLICATION.
- (2) RENOVATE THE AREA TO BE RE-SEED BY RAKING THOROUGHLY AND MIX STERILIZED (WEED-FREE) ORGANIC MULCH (50-50 BY VOLUME) INTO THE TOP TWO INCHES OF SOIL.

NOTICE: STAUFFER CHEMICAL COMPANY MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR ANY PARTICULAR PURPOSE, CONCERNING THIS MATERIAL, EXCEPT THOSE WHICH ARE CONTAINED ON STAUFFER'S LABEL.