

(11/14/86)

ELANCO

TURF & ORNAMENTAL FERTILIZER

ACCEPTED

contains

FEB 24 1987

BALAN® 0.46% and SURFLAN® 0.46%

1471-163

A GRANULAR FERTILIZER CONTAINING BALAN® AND SURFLAN® FOR THE PRE-EMERGENCE CONTROL OF CRABGRASS, FOXTAIL, GOOSEGRASS, POA ANNUA AND OTHER ANNUAL WEED GRASSES IN ESTABLISHED TURFGRASSES AND ORNAMENTALS.

Active Ingredients:

N-butyl-N-ethyl-α,α,α-trifluoro-2,6-dinitro-p-toluidine....0.46%
oryzalin: 3,5-dinitro-N⁴,N⁴-dipropylsulfanilamide.....0.46%

Inert Ingredients.....99.08%

Contains 0.46 pounds active ingredient per 50 pound bag.

BALAN® (benefin, Elanco)
SURFLAN® (oryzalin, Elanco)

GUARANTEED ANALYSIS

TOTAL NITROGEN(N).....24.0%
AVAILABLE PHOSPHORIC ACID(P₂O₅).....6.0%
SOLUBLE POTASH(K₂O).....12.0%

PRECAUTIONARY STATEMENTS

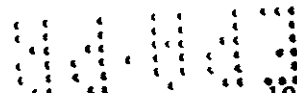
Hazards to Humans and Domestic Animals

Keep Out of Reach of Children

WARNING

Causes eye irritation. Do not get in eyes. Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing dust and contact with skin or clothing. The granular formulation may cause skin sensitization reactions in certain individuals. Use eye protection and protective clothing such as coveralls, a long-sleeved shirt and impermeable gloves when handling this product. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

BEST AVAILABLE COPY



Statements of Practical Treatment

If in eyes: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Call a physician.

If swallowed: Call physician or Poison Control Center. Drink promptly a large quantity of milk, egg white, gelatin solution, or, if these are not available, large quantities of water. Avoid alcohol.

If on skin: Wash with plenty of soap and water. Get medical attention if irritation develops.

If inhaled: If breathing difficulty occurs, move individual to fresh air and get medical attention.

Environmental Hazards

Do not contaminate any body of water by direct application, cleaning of equipment or disposal of wastes.

STORAGE AND DISPOSAL

Storage: Store in original container only. In case of leak or spill, contain material and dispose as waste.

Pesticide Disposal: Do not contaminate water, food, or feed by storage or 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 bag 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.

DIRECTIONS FOR USE -- Read All Directions Carefully Before Applying

Elanco's Turf & Ornamental Fertilizer containing BALAN and SURFLAN can be used as a selective preemergence herbicide for the control of most annual grasses and certain broadleaf weeds in:

Established Warm Season Turf

- Bahigrass
- Bermudagrass
- Centipedegrass
- St. Augustinegrass
- Tall Fescue
- Zoysiagrass

Container Grown Ornamentals

- Landscape Ornamentals
- Ground Covers

The granular fertilizer containing BALAN and SURFLAN is recommended to control the following weed species:

Annual Grasses Controlled

<u>Summer Annuals</u>	<u>Winter Annuals</u>
Barnyardgrass (watergrass)	Bluegrass annual
Crabgrass	
(Large crabgrass)	
(Smooth crabgrass)	
Crowfootgrass	
Foxtails	
(Bottlegrass)	
(Bristlegrass)	
(Giant foxtail)	
(Green foxtail)	
(Pigeongrass)	
(Robust foxtail)	
(Yellow foxtail)	
Goosegrass	
(Silver crabgrass)	
Johnsongrass	
(from seed only)	
Lovegrass, little*	
Oat, wild*	
Ryegrass, annual	
Sandbur, field	

*Controlled only at ornamental rates.

Annual Broadleaf Weeds Controlled

<u>Summer Annuals</u>	<u>Winter Annuals</u>
Carpetweed	Chickweed, common
Knotweed, prostrate	Henbit
Purslane, common	

Annual Broadleaf Weeds Partially Controlled

- Carrot, wild
- Fleabane, dwarf
- Groundsel, common
- Mustard, Indiana
- Spurge, prostrate
- Woodsorrel, yellow

ESTABLISHED LAWNS AND GOLF COURSES

This product should be applied one to two weeks prior to the anticipated germination of the target annual weeds and grasses at an application rate of 326 pounds of product per acre (7 1/2 pounds per 1000 sq.-ft.). Apply using a properly calibrated granular fertilizer spreader which will uniformly distribute the product over the target area. Avoid skips and excessive overlaps as poor control or turfgrass injury may occur.

Do not reseed treated areas for a minimum of 12 weeks following treatment. This product will not harm most nearby established ornamentals. Do not apply this product to golf course putting greens, dichondra, or newly sprigged areas of bermudagrass, St. Augustinegrass, centipedegrass, or zoysiagrass. Any cultural practices that disturb the soil, such as aerification and verti-cutting, should be done prior to application.

Optimum weed control performance will be obtained if treated areas are irrigated soon after application.

ORNAMENTALS

The granular fertilizer containing BALAN and SURFLAN is a pre-emergence, surface applied herbicide for the control of most annual grasses and certain broadleaf weeds.

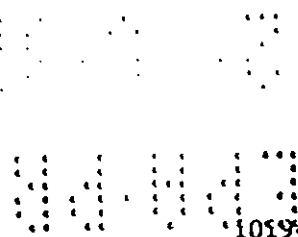
General Use Precautions

Apply only to established plantings. Rooted liners should be established in containers two weeks prior to treatment or crop injury may occur.

On container grown ornamentals, where weed seed germination continues for extended periods of time, subsequent applications of the granular fertilizer containing BALAN and SURFLAN should not be made any sooner than 90 days after application or crop injury may occur.

Do not apply in ornamental plantings where the likelihood of runoff onto lawn areas container dichondra or cool season turfgrass species exist as severe injury or death may occur. Poor weed control may result if directions are not followed. Over application may result in crop injury or excessive soil residue.

Plant only ornamental species listed on this label into soil treated the previous season with the granular fertilizer containing BALAN or SURFLAN or injury may occur.



Soil Preparation

The granular fertilizer containing BALAN and SURFLAN will not control established weeds. Areas to be treated should be free of established weeds or controlled with postemergence herbicides. Weed residues, prunings and trash should be thoroughly mixed into the soil or removed prior to treatment. The soil should be in good tilth and free of clods at the time of application.

Application Equipment

Apply evenly over the area. Both drop type and rotary type spreaders may be used. Avoid the use of spreaders which may apply the material in narrow concentrated bands. For best results use equipment designed to apply granular herbicides and insecticides. Calibrate application equipment prior to use according to the manufacturers directions. Check frequently to be sure equipment is working properly and distributing granules uniformly.

Activation and Cultivation

The granular fertilizer containing BALAN and SURFLAN will remain stable on the soil surface; however, rainfall or irrigation is needed to move the chemical into the soil. If weeds begin to emerge due to lack of rainfall or irrigation, shallow cultivate (1 to 2 inches) to destroy existing weeds and place the chemical in the weed germination zone. Shallow cultivation (1 to 2 inches) will not reduce herbicidal effectiveness.

Ornamental Plants

The granular fertilizer containing BALAN and SURFLAN is recommended for use on the following species. All species on the following list may be treated when field grown; those species marked with an asterisk may also be treated when container grown. Species not marked with an asterisk should not be treated if container grown.

<u>Common Name</u>	<u>Scientific Name</u>
Bamboo, Heavenly	<u>Nandina domestica</u>
Bottlebrush	<u>Callistemon spp.</u>
Boxwood, Japanese	<u>Buxus microphylla</u>
Capeweed, African	<u>Arctotheca calendula</u>
Daisy, Trailing African	<u>Osteospermum fruticosum</u>
Fescue, Blue	<u>Festuca ovina</u>
Firethorn, Scarlet*	<u>Pyracantha coccinea</u>
Gazania	<u>Gazania spp.</u>
Ice-plant, Largeleaf	<u>Mesembryanthemum edule</u>
Ice-plant, Red Trailing	<u>Lampranthus spectabilis</u>
Ivey, Algerian	<u>Hedera canariensis</u>
Ivy, English	<u>Hedera helix</u>

<u>Common Name</u>	<u>Scientific Name</u>
Juniper	<u>Juniperus spp.</u>
Lily-of-the-Nile*	<u>Agapanthus africanus</u>
Oleander*	<u>Nerium oleander</u>
Olive	<u>Olea europaea</u>
Peppertree, California	<u>Schinus molle</u>
Photinia	<u>Photinia spp.</u>
Raphiolepis	<u>Raphiolepis spp.</u>
St. Johnsworth	<u>Hypericum spp.</u>

Precaution

Ice-Plant: When establishing unrooted Ice-plant on coarse soils in landscape plantings, use only the 435 pound rate or crop injury may occur. After the Ice-plant is well established, a second application may be made.

Broadcast Application Rates

Apply the granular fertilizer containing BALAN and SURFLAN prior to the germination of annual weeds. For preemergence control, apply 435-650 pounds per acre. Use the higher application rate when control of weeds is desired for a longer period, 6-8 months.

For application to small areas, apply the following amounts of product.

<u>Per Acre</u>	<u>Per 1000 Sq. Ft.</u>
435 pounds	10 pounds
650 pounds	15 pounds

DISCLAIMER OF WARRANTIES

The manufacturer makes no warranties concerning this product or its use, which extend beyond the description on the label. All other warranties, express or implied, including but not limited to any implied warranties of merchantability and fitness for a particular purpose, are disclaimed. All statements concerning this product apply only when used as directed.

LIMITATION OF DAMAGES

Elanco's liability, whether in contract, warranty, tort, negligence, strict liability or otherwise, should not exceed the return of the amount of the purchase price of the granular fertilizer containing BALAN and SURFLAN and under no circumstances should Elanco be liable for special, indirect or consequential damages.

BALAN® (benefin, Elanco)
SURFLAN® (oryzalin, Elanco)

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EPA Reg. No. 0000-000

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Balan/Surflan Fertilizer/0.46
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