

4534

Mallinckrodt

1 GAL.  
(3.8 Liter)

PRE-SAN II

## ACTIVE INGREDIENT:

S-(0,0-DIISOPROPYL PHOSPHORODITHIOATE  
Ester of N-(2-MERCAPTOETHYL) BENZENE-  
SULFONAMIDE ..... 33%  
INERT INGREDIENTS ..... 67%

This product contains 2.9 lb. of active ingredient per gallon, and  
contains petroleum distillates.

KEEP OUT OF REACH OF CHILDREN  
WARNING

## STATEMENT OF PRACTICAL TREATMENT

IF IN EYES. Cause a substantial but temporary eye  
injury. Flush eyes with plenty of water for 15 minutes. Get medical attention.

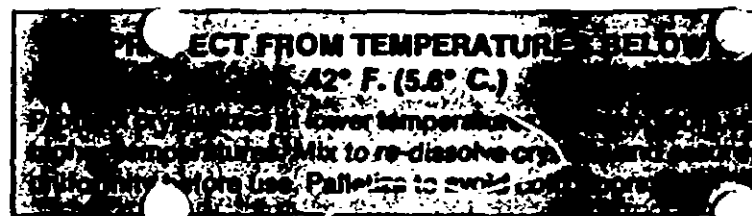
IF INHALED. Remove victim to fresh air. Apply artificial respiration if  
indicated.

IF ON SKIN. Wash off with soap and water. Remove contaminated  
clothing, and wash before reuse.

IF SWALLOWED. Call a physician or Poison Control Center immediately.  
Gastric lavage is indicated if material was taken internally. DO NOT  
INDUCE VOMITING; vomiting may cause aspiration pneumonia.

Note to Physician: If signs of cholinesterase inhibition occur, Atropine by  
injection and 2 PAM are antidotal.

SEE LEFT PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS



U.S. Patent No. 3,205,253 3,298,819

EPA REG. NO. 372-

EPA EST. NO. 228-IL-1

MANUFACTURED FOR

MALLINCKRODT, INC.

ST. LOUIS, MISSOURI 63147

## PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION HARMFUL IF SWALLOWED. Inhaled, or absorbed through skin. Avoid  
breathing spray mist. Avoid contact with skin, eyes and on clothing.  
Wash thoroughly with soap and water after handling. Wash  
contaminated clothing before reuse. Do not contaminate feed or food  
for children and pets out of treated area during application.

## ENVIRONMENTAL HAZARDS

THIS PRODUCT IS TOXIC TO FISH. Do not apply when weather conditions  
favor drift from areas treated. Do not apply where runoff is likely to occur.  
Do not contaminate any body of water by direct application, cleaning of  
equipment or disposal of wastes and containers.

## PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

## DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL (U.S.A.) LAW TO USE THIS PRODUCT  
IN A MANNER INCONSISTENT WITH ITS LABELING.

PRE-SAN II is recommended for use on mineral soils only. Do not apply  
peat moss to lawn ground covers or established ornamentals before  
treating with PRE-SAN II.

Application of PRE-SAN II 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 PRE-SAN II.

Remove leaves, dead tall grass, and other debris before applying  
PRE-SAN II to turf areas. Any weeds present around ornamentals must be  
removed or worked into the soil before applying PRE-SAN II.

## TIMING OF APPLICATION

GRASS LAWNS. PRE-SAN II should be applied only to well  
grass lawns. It can be used on the following established turf:

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

DICHONDRA LAWNS. PRE-SAN II can be applied to dichondra lawns at the  
time of seeding or any time thereafter.

For control of CRABGRASS, apply PRE-SAN II 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 any early spring application, the application must be made prior to  
crabgrass emergence. (See above.)

For control of ANNUAL BLUEGRASS AND OTHER ANNUAL WEEDS, apply  
PRE-SAN II at the recommended rate (see "Rates of Application") before  
the weeds emerge from the soil.

## \*RATES OF APPLICATION

Apply a maximum of 8-2/3 gal. (66 pt.) of PRE-SAN II per acre (25 ft. oz. per  
1,000 sq. ft.) per year in two or more applications depending on the weed  
species and degree of infestation.

CRABGRASS. Apply 2-5/8 gal. (21 pt.) of PRE-SAN II in 80 to 100 gal. of  
water uniformly on 1 acre (7.7 ft. oz. per 1,000 sq. ft.).

ANNUAL BLUEGRASS AND OTHER ANNUAL WEEDS. Apply 4-1/3 gal. of  
PRE-SAN II in 80 to 100 gal. of water uniformly on 1 acre (13 ft. oz. per 1,000  
sq. ft.).

## DIRECTIONS FOR USE — Cont'd.

In southern or western states where germination of crabgrass, annual  
bluegrass and other annual weeds extend into the late summer and early  
fall, a second application of PRE-SAN II at the recommended rates should  
be made 4 to 5 months after the initial application.

Consult weed specialists of the state agricultural extension service or the  
state agricultural experiment stations for additional information as the  
timing of application will vary with local conditions.

PRE-SAN II 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  
PRE-SAN II off the grass and down into the soil where the weed seeds are  
located.

## PRODUCT INFORMATION

PRE-SAN II is recommended for use on home lawns, parks and golf  
courses for control of crabgrass, annual bluegrass and other annual  
weeds listed.

## WEEDS CONTROLLED

|                  |                                 |
|------------------|---------------------------------|
| Annual Bluegrass | (Poa annual)                    |
| Bermudagrass     | (Watergrass) (Echinochloa spp.) |
| Bentgrass        | (Menbit) (Lamium spp.)          |
| Fall Panicum     | (Panicum dichotomiflorum)       |
| Festuca          | (Setaria spp.)                  |
| Gonagrass        | (Eleusine indica)               |
| Many Crabgrass   | (Digitaria sanguinalis)         |
| Lambquarters     | (Chenopodium album)             |
| Redroot Pigweed  | (Amaranthus retrofractus)       |
| Shepherdspurse   | (Capsella bursa-pastoris)       |
| Smooth Crabgrass | (Digitaria ischaemum)           |

(NOTE: PRE-SAN II does not control established weeds.)

## 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 PRE-SAN II treated  
areas:

1. Do not reseed within 4 months after application. 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.
2. When turf diseases or physiological disorders necessitate reseeding  
sooner than 4 months after PRE-SAN II application, apply powdered  
activated charcoal prior to reseeding to deactivate the PRE-SAN II.  
Apply the activated charcoal at a rate of 7 lb. per 1,000 sq. ft. in 14 gal.  
of water per 1,000 sq. ft. (300 lb. per acre in 600 gal. of water per acre).  
Following application, irrigate the turf with sufficient water to wash  
the charcoal into the soil. Repeat no sooner than 7 days after  
applying the charcoal.

## STORAGE AND DISPOSAL

STORAGE: Stable at normal temperatures and humidities. Store  
above 42°F. (5.6°C).

PRECAUTIONS: Do not contaminate water, food, or feed by  
storage or disposal. Open dumping is prohibited.

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.

## WARRANTY

This material conforms to the description on the label and is reasonably  
fit for the purposes referred to in the directions for use. Timing and  
method of application, weather, watering practices, nature of soil or  
planting medium, the disease problem, condition of the crop,  
incompatibility with other chemicals not specifically recommended, and  
other influencing factors in the use of this product are beyond the control  
of the seller. Buyer assumes all risks of use, storage or handling of this  
material not in strict accordance with directions given hereon. NO  
OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR  
MERCHANTABILITY IS MADE.

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4534

Mallinckrodt

1 GAL.  
(3.8 Liter)**PRECAUTIONARY STATEMENTS****HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION HARMFUL IF SWALLOWED. Avoid breathing spray mist. Avoid contact with skin, eyes, and on clothing. Wash thoroughly with soap and water after handling. Wash contaminated clothing before reuse. Do not contaminate feed or food. Keep children and pets out of treated area during application.

**ENVIRONMENTAL HAZARDS**

THIS PRODUCT IS TOXIC TO FISH. Do not apply when weather conditions favor drift from areas treated. Do not apply where runoff is likely to occur. Do not contaminate any body of water by direct application, cleaning of equipment or disposal of wastes and containers.

**PHYSICAL OR CHEMICAL HAZARDS**

Do not use or store near heat or open flame.

**DIRECTIONS FOR USE**

IT IS A VIOLATION OF FEDERAL (U.S.A.) LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING

PRE-SAN II is recommended for use on mineral soils only. Do not apply peat moss to lawn, ground covers or established ornamentals before treating with PRE-SAN II.

Application of PRE-SAN II 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 soil. Weeds are visible above the soil it is too late to apply PRE-SAN II.

Remove leaves, dead grass and other debris before applying PRE-SAN II to turf areas. Any weeds present around ornamentals must be removed or worked into the soil before applying PRE-SAN II.

**TIMING OF APPLICATION**

GRASS LAWNS: PRE-SAN II 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 | Cynara          |

DICHONDRA LAWNS: PRE-SAN II can be applied to dichondra lawns at the time of seeding or anytime thereafter.

For control of CRABGRASS, apply PRE-SAN II 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 any early spring application, the application must be made prior to crabgrass emergence (see above).

For control of ANNUAL BLUEGRASS AND OTHER ANNUAL WEEDS, apply PRE-SAN II at the recommended rate (see Rates of Application) before the weeds emerge from the soil.

**\*RATES OF APPLICATION**

Apply a maximum of 3.3 gal (169 pt) of PRE-SAN II per acre (25 fl oz per 1,000 sq ft) per year. Two or more applications depending on the weed species and degree of infestation.

CRABGRASS: Apply 2.5 gal (121 pt) of PRE-SAN II in 80 to 100 gal of water uniformly on 1 acre (7.7 fl oz per 1,000 sq ft).

ANNUAL BLUEGRASS AND OTHER ANNUAL WEEDS: Apply 4 1/3 gal of PRE-SAN II in 80 to 100 gal of water uniformly on 1 acre (13 fl oz per 1,000 sq ft).

**DIRECTIONS FOR USE — Cont'd**

In southern or western states where germination of crabgrass, annual bluegrass and other annual weeds extend into the late summer and early fall, a second application of PRE-SAN II at the recommended rates should be made 4 to 5 months after the initial application.

Consult weed specialists, state agricultural extensions, or state or the state agricultural experiment stations for additional information as the timing of application varies with local conditions.

PRE-SAN II should be applied with spray equipment that will provide uniform application such as a knapsack sprayer, hose-end sprayer, or pressure sprayer.

Sprinkle with water 1 to 2 inches after application. Wash the PRE-SAN II off the grass and into the soil where the weed seeds are located.

**PRE-SAN® II****ACTIVE INGREDIENT:**

S-(10,10-DIISOPROPYL PHOSPHORODITHIOATE)

Ester of N-(2-MER-1-PTOETHYL) BENZENE-

SULFONAMIDE 33%

INERT INGREDIENTS 67%

This product contains 2.9 lb of active ingredient per gallon and contains petroleum distillates.

## KEEP OUT OF REACH OF CHILDREN

# WARNING

**STATEMENT OF PRACTICAL TREATMENT**

IF IN EYES. Cause substantial but temporary eye injury. Flush eyes with plenty of water for 15 minutes. Get medical attention.

IF INHALED. Remove victim to fresh air. Apply artificial respiration if indicated.

IF ON SKIN. Wash off with soap and water. Remove contaminated clothing and wash before reuse.

IF SWALLOWED. Call a physician or Poison Control Center immediately. Gastric lavage is indicated if material was taken internally. DO NOT INDUCE VOMITING; vomiting may cause aspiration pneumonia.

Note to Physician: If signs of cholinesterase inhibition occur, Atropine by injection and 2 PAM are antidotal.

SEE LEFT PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

**PROTECT FROM TEMPERATURES BELOW:**  
**42° F. (5.6° C.)**

Product crystallizes at lower temperatures. Warm or store at higher temperatures. Mix to re-dissolve crystals and assure uniformity before use. Palletize to avoid cold floors.

U.S. Patent Nos. 4,295,251; 3,298,819

EPA REG NO 372-

EPA EST NO 228-IL-1

MANUFACTURED FOR

**MALLINCKRODT, INC.**

ST. LOUIS, MISSOURI 63147

**ACCEPTED**

FEB 22 1985

Under Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 372-61

## PRODUCT INFORMATION

PRE-SAN II is recommended for use on home lawns, parks and golf courses for control of crabgrass annual bluegrass and other annual weeds listed.

## WEEDS CONTROLLED

|                  |                                 |
|------------------|---------------------------------|
| Annual Bluegrass | (Poa annual)                    |
| 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 retrofractus)       |
| Shepherdspurse   | (Capsella bursa-pastoris)       |
| Smooth Crabgrass | (Digitaria ischaemum)           |

(NOTE: PRE-SAN II does not control established weeds.)

## 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 PRE-SAN II treated areas:

1. Do not reseed within 4 months after application. 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.
2. When turf diseases or physiological disorders necessitate reseeding sooner than 4 months after PRE-SAN II application, apply powdered activated charcoal prior to reseeding to deactivate the PRE-SAN II. Apply the activated charcoal at a rate of 7 lb. per 1,000 sq. ft. in 14 gal. of water per 1,000 sq. ft. (300 lb. per acre in 600 gal. 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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## STORAGE AND DISPOSAL

**STORAGE:** Stable at normal temperatures and humidities. Store above 42°F. (5.6°C.)

**PROHIBITIONS:** Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

**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.

## WARRANTY

This material conforms to the description on the label and is reasonably fit for the purposes referred to in the directions for use. Timing and method of application, weather, watering practices, nature of soil or polluting medium, the disease problem, condition of the crop, incompatibility with other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of the seller. Buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herewith. NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY IS MADE.