



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg.
Number:

2491-342

Date of Issuance:

JUL 22 1993

NOTICE OF PESTICIDE:
 X Registration
 Reregistration

(under FIFRA, as amended)

Term of Issuance: Until
Reregistration

Name of Pesticide Product:

Koos Dursban 2.32
Granules

Name and Address of Registrant (Include ZIP Code):

Koos, Incorporated
4500 13th Court
Kenosha, Wisconsin 53140

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

2. Change the label by revising the EPA Registration Number to read, "EPA Reg. No. 2491-342".

3. Submit five copies of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Signature of Approving Official:

DENNIS H. EDWARDS

Dennis H. Edwards, Jr.
Product Manager 19
Insecticide-Rodenticide Branch
Registration Division (H7505C)

Date:

JUL 22 1993

3.32 GRANULES

For Insect Control in Ornamental & Recreational Turf - Controls Ants, Fleas, Ticks, and Controls Fire Ants - Also For Treating Potting Soils and Container Grown Nursery Stock
1 POUND TREATS UP TO 1,000 SQ.FT.

Controls Ants, Armyworms (Beet, Fall, Yellow-striped), Brown Dog Ticks, Centipedes, Chinch Bugs, Clover Mites, Cutworms, Cicadas, Earwigs, European Crane Fly larvae, Flea Beetles, Fleas, Grasshoppers, Leafhoppers, Millipedes, Mole Crickets, Sod Webworms (Lawn Moth), Sow Bugs, Springtails, Turfgrass Weevil (Hyperodes), White Grubs (Species of Black Turfgrass Abaxius, European Chafer, Southern Chafer, Japanese Beetle and June Beetle larvae), Bluegrass Billbugs, Fire Ants.

*See Specific Directions

**RESIDUAL INSECT CONTROL FOR PARKS - GOLF COURSES - ATHLETIC FIELDS - HOME LAWNS.
FOR OUTSIDE OF HOMES - APARTMENTS - CONDOMINIUMS - WAREHOUSES - HOSPITALS - SCHOOLS -
FOOD HANDLING ESTABLISHMENTS - COMMERCIAL AND OFFICE BUILDINGS.**

ACTIVE INGREDIENT:

Chlorpyrifos (0,0-Diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate) - 2.32%

INERT INGREDIENTS:

87.68%

Total 100.00%

DURSEAN is a Registered
Trademark of Dow Chemical

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

EPA Est. No. 2491-W-1

STATEMENTS OF PRACTICAL TREATMENT

IF ALLOWED: Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. DO NOT induce vomiting or give anything by mouth to an unconscious or convulsing person. Get medical attention. **IF IN EYES:** Flush eyes with plenty of water. **IF ON SKIN:** In case of contact, remove contaminated clothing and wash affected area with soap and water.

NOTE TO PHYSICIAN: Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. Atropine is an antidote only by injection.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: May be harmful if swallowed. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Wash thoroughly after handling and before eating or smoking. Wash contaminated clothing before reuse. Keep away from food, feedstuffs, and water supplies. Keep children and pets off treated areas until this material is washed into the soil and the grass is dry.

ENVIRONMENTAL HAZARDS

This product is toxic to birds, fish, and aquatic invertebrates. Birds feeding in treated areas may be killed. Clean up spilled product to reduce exposure to wildlife. For terrestrial use, do not apply directly to water, or to areas where surface water is present or to terrestrial areas below the mean highwater mark. Runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

SEE BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS DIRECTION FOR USE

Labels of Federal law to use this product in a manner consistent with its labeling.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. **STORAGE:** Store product in its original labeled container in a cool, dry, locked place out of reach of children. **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:** 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. **HOUSEHOLD:** Do not re-use empty container. Wrap container and put in trash.

*SPECIFIC DIRECTIONS

The following paragraphs correspond to insects followed by asterisk(*) on the above front panel. Insects not followed by an asterisk(*) may be controlled by following the instructions FOR USE ON LAWNS, etc. Repeat treatment as needed for control.

TICKS, & FLEAS

Use 1 lb. per 1,000 sq. ft. (10 lb. per 10,000 sq. ft.) for area control of these insects, infesting non-crop land areas such as meadows, footpaths, and trails, picnic and camping sites, parks, recreational areas and around dwellings where these pests are present and are causing a nuisance. DO NOT allow use of treated area during applications. For Fleas (out-of-door; only) also treat sleeping quarters and other areas frequented by pets such as barnyard porches and along fencing.

CHINCH BUGS

Apply 1 to 1 1/2 lb. per 1,000 sq. ft. when insects appear or their damage is imminent. To prevent damage apply as soon as daily temperatures reach 80 degrees and repeat every 2 months. Use low rate for minimum infestations; higher rate for heavy infestations.

SOD WEBWORMS

For Sod Webworms, delay watering or mowing the treated area for 12 to 24 hours after treatment. Treat in the spring or when insects first appear troublesome. Additional treatments at 30 day intervals may be needed for new infestations. Apply at rate of 1 lb. per 1,000 sq. ft.

SOIL INSECTS

TURFGRASS WEEVIL

Use 2 lb. per 1,000 sq. ft. Treat suspected problem areas in mid-April and again in mid-May or as recommended by your local Agricultural Extension Service.

WHITE GRUB SPECIES - CRANE FLY LARVAE

MOLE CRICKETS

To control White Grubs (Black Turfgrass Abaxius, European Chafer, Southern Chafer, Japanese Beetle and June Beetle larvae) and Mole Crickets, apply 2 to 4 lb. per 1,000 sq. ft. When the higher rate is required make two applications of 2 lb. per 1,000 sq. ft. spaced 14 days apart. For best results remove thatch first and treat when grubs are young and actively feeding near the soil surface, usually during late July and August. Consult your local Agricultural Extension Service Specialist for best time to treat.

European Crane Fly larvae will be controlled using 1 lb. per 1,000 sq. ft. or will be controlled simultaneously with the same application being applied for control of "White Grubs" (2 lb./1,000 sq. ft.). Consult your Agricultural Agent for proper time to apply. For best results, first remove thatch. Water the granules into the soil.

BLUEGRASS BILLBUGS

Use 2 lb. per 1,000 sq. ft. for Billbug grubs. Remove thatch before treatment. Wash granules into soil as for White Grubs.

IMPORTED FIRE ANT CONTROL MOUND TREATMENT

To control Fire Ants in lawns, turf and premise areas, apply 1 ounce (approx. 4 to 5 level tablespoons) evenly over and around each mound. For best results, do not disturb the mound before or during the application. Apply in cool weather (65-80 F), or in early morning or later evening. Treat new mounds as they appear.

FIRE ANT CONTROL IN NURSERY, BENCH AND POTTING SOILS INTENDED PRIMARILY FOR WOODY ORNAMENTALS TO BE GROWN OUTDOORS IN CONTAINERS

Use 1 lb. + 2 oz. (18 ounces) of this product with 1 cubic yard of growing medium. Thoroughly blend granules into media using an appropriate mechanical mixer. Wear dust mask, body covering clothing and chemical resistant gloves during the operation. Do not use plants which have been exposed to treated soil for food or feed purposes. For 10" or 12" solid plugs use 4 lbs. (2 lbs./5" x 5" pot or 6 to 8 lbs. for a 15 to 20 inch pot. Mix into soil surface.

FOR USE ON LAWNS, PARKS, GOLF COURSES, SOD FARMS, PLAYGROUNDS AND ALL OTHER ORNAMENTAL AND RECREATIONAL TURF AREAS

Apply Dursean® 3.32 Granules uniformly to home lawns, golf courses, parks, playgrounds, and lawns, and any other ornamental and recreational turf and non-crop land areas using any hand or power operated gravity or rotary type spreader designs,* for application of granules.

SURFACE INSECTS

For Surface Insects: Ants, Armyworms (Beet, Fall, Yellow-striped), Ticks, Centipedes, Cutworms, Cicadas, Earwigs, Flea Beetles, Fleas, Grasshoppers, Leafhoppers, Millipedes, Clover Mites, Sowbugs, and Springtails use 1 lb. per 1,000 sq. ft. (44 lb. per acre). Treat when insects first appear. Sprinkle the turf evenly to wash granules off grass to soil surface. Observe delayed watering for Sod Webworm control.

SOIL INSECTS

For Soil Insects as listed on this label including Mole Crickets increase the rate to 2 lb. per 1,000 sq. ft. immediately after application, irrigate the turf with 30 gallons of water per 1,000 sq. ft. (or equivalent to 1/2 inch water) to move the granules down into the zone of insect infestation. Repeat treatment as necessary.

SPREADER SETTINGS

Make of Spreader	For 8" chute spreader	For 12" chute spreader
Orion Broadcast Model	1 lb./1,000 sq. ft.	2 lb./1,000 sq. ft.
Cyclone B-1 Pro	1	1 1/2
Scotts Rotary RER 2	25 1/2	27 1/2

For the Orion broadcast spreader make 2 passes (up and back) over the same 12 ft. wide section following the same wheel tracks. The light weight of the granules causes a heavier application over the 8 ft. wide track in the fall, as the 3 trips (one up, and one back) over the application make and pass 12 ft. over most wheel tracks, and repeat process. Above spreader settings are approximate. Rate of wind, moisture, and other conditions can vary the settings necessary to apply the correct amount.

TREAT LAWNS AND PERIMETER WOODED AREAS FOR CONTROL OF TICKS THAT VECTOR "LYME DISEASE"

For control of Deer Ticks and Lone Star Ticks (which may vector Lyme Disease) and other common ticks (American Dog Tick, Brown Dog Tick, Cattle Fever Tick and Gulf Coast Tick) around houses and in yard areas apply 1 lb. per 1,000 sq. ft. When applying granules take precautions against ticks by holding pant legs into socks and by applying on insects reported in shoes and clothing. Wear light colored clothing to aid in spotting ticks that may cling to your clothing when working in the area. Apply granules under shrubbery, in and around ground covers, and around patios. Treat entire lawn and perimeter wooded areas and properly maintain where exposure to ticks may occur. To reduce tick harborage keep all nearby growth well trimmed and mowed before and after treatment. Rodents also serve as hosts for ticks. Remove rock and other wood piles and destroy other rodent habitats. Treat April through November or consult your local University Extension Service for proper timing. Ticks may be reintroduced from surrounding areas or host animals. Repeat treatment as necessary to maintain adequate control levels.

INSECT CONTROL USING BAND AND PERMETER TREATMENT

USE FOR CRAWLING INSECT CONTROL OUTSIDE OF HOMES, APARTMENTS, CONDOMINIUMS, WAREHOUSES, HOSPITALS, SCHOOLS, FOOD HANDLING ESTABLISHMENTS, AND COMMERCIAL BUILDINGS

Do not use indoors. To protect insects from entering the interior, a band of granules may be placed around the outside of buildings to kill Ants, Brown Dog Ticks, Cicadas, Earwigs, Fleas, Millipedes, Sowbugs, Springtails and Spiders before they attempt to enter. Use 1 pound in 1,000 sq. ft. (in a band 6 ft. x 180 ft. long) around the structure. Apply when insects have become troublesome or before they cause problems in the spring or early fall. Repeat one month later and then as needed for control but not more than once every 7 days. Keep children and pets off treated area until granules are sprinkled in and the area is dry.

NOTICE: Buyer and user assumes all risk and liability of use, storage and handling of this product not in accordance with the terms of this label.
(2491-GUE) (EPA 04-27-83 corrected vers. 05-81-83)

KODS INC.

NET WEIGHT 10, 20, 40, POUNDS
4500 13th Court - Kenosha, WI 53140 U.S.A.