

ROHM AND HAAS COMPANYINDEPENDENCE MALL WEST
PHILADELPHIA, PENNSYLVANIA 19105

EPA Reg. No. 707-159-AA

EPA Est. No. 33961-NJ-1

SUPPLEMENTAL LABELING FOR KERB^R 50-W HERBICIDE USE IN BLUEBERRIES

DIRECTIONS FOR USE

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

NOTICE: Before using this product, read the entire Precautionary Statements, Conditions of Sale and Warranty, Directions for Use, Use Precautions and Storage and Disposal Instructions on side panels and attached use directions. If the Conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

GENERAL INFORMATION

KERB 50-W is a selective herbicide recommended for fall and early winter applications to established blueberries for both preemergence and postemergence control of winter annual and perennial grasses and chickweed and preemergence control of certain broadleaf weeds.

DOSAGE RECOMMENDATIONS

KERB 50-W herbicide is recommended at the rate of 2.0 to 4.0 pounds of product (1.0 to 2.0 pounds active ingredient) per acre broadcast application. The rate will depend on the weed species present. Follow the weed control recommendations listed in the chart below:

<u>Weeds Controlled</u>		Pounds KERB 50-W Per Acre ¹ Dependable Rainfall or Overhead Irrigation ²
BLUEGRASS, ANNUAL BROME, DOWNY (CHEATGRASS) CHICKWEED	OAT, WILD SORREL, RED (from seed)	2.0
BENTGRASS BLUEGRASS, KENTUCKY FESCUE, TALL ORCHARDGRASS	QUACKGRASS RYEGRASS, PERENNIAL VELVETGRASS	4.0

¹Dosage rates recommended are in pounds of KERB 50-W per acre broadcast application. Reduce rates accordingly for banded applications.

²For effective weed control, rainfall or overhead irrigation is essential following the application of KERB 50-W.

ACCEPTED

APR - 4 1986

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 707-159

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CROP TOLERANCE

Established blueberry plants are tolerant to recommended rates of KERB 50-W herbicide. Do not apply KERB 50-W to newly transplanted blueberries until roots are well established.

TIMING AND APPLICATION

Apply KERB 50-W herbicide in a single application during the fall or early winter months, but prior to soil freeze-up and snow cover. Optimum herbicidal activity occurs when applications are made under cool temperature conditions (55°F or less) and are followed by rainfall or overhead irrigation.

Mix the recommended amount of KERB 50-W in clean water and apply uniformly with a low pressure ground sprayer in 20 to 50 gallons of water per acre.

BLUEBERRIES - SPECIFIC USE RESTRICTIONS

- Do not make more than one application of KERB 50-W herbicide per year and do not apply KERB 50-W at rates higher than 4.0 pounds product (2.0 pounds active ingredient) per acre.

IMPORTANT

All applicable directions, restrictions and precautions on the EPA registered label are to be followed. This label must be in the possession of the user at the time of application.

CONDITIONS OF SALE AND WARRANTY

Rohm and Haas warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Handling, storage and use of the product by Buyer or User are beyond the control of Rohm and Haas and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property or failure to follow label directions will be assumed by the Buyer or User. IN NO CASE WILL ROHM AND HAAS OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.

KERB is a registered trademark of the Rohm and Haas Company.

1073A/395Z
8/28/85

ROHM AND HAAS COMPANY

INDEPENDENCE MALL WEST
PHILADELPHIA, PENNSYLVANIA 19105



ACCEPTED

OCT 30 1985

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 707-159

KERBR[®] 50-W Herbicide in Water Soluble Pouches

EPA Reg. No. 707-159

Revised Labeling

Use on Fallow Land

The attached labeling will replace the use directions of the "Fallow Land" section of the registered label.

(8202E/202Z)

ROHM AND HAAS COMPANY

INDEPENDENCE MALL WEST
PHILADELPHIA, PENNSYLVANIA 19105

EPA REG. NO. 707-159-AA
EPA EST. NO. 33961-NJ-1



ACCEPTED

OCT 30 1985

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 707-159

KERB[®] 50-W HERBICIDE USE ON FALLOW LAND

DIRECTIONS FOR USE

GENERAL INFORMATION

KERB 50-W is a selective herbicide for use on fallow land to control certain winter annual grasses and volunteer grains.

Use of the product is restricted to summer fallow land which will be planted back the following year to winter wheat, barley or oats.

Use rates and plant-back restrictions for KERB 50-W herbicide should be strictly followed or severe injury to the following small grain crop may occur.

KERB 50-W is a soil active herbicide that is absorbed through weed roots. In order to achieve good weed control, sufficient soil moisture from rain, melting snow or irrigation is required following treatment to move KERB into the soil to the weed root zone.

Do not use any fall tillage prior to or after the application of KERB 50-W herbicide to fallow land, since weed control will be reduced.

To ensure best weed control results with KERB 50-W, use a straw spreader when combining to eliminate chaff rows.

WEEDS CONTROLLED

KERB 50-W herbicide will provide preemergence and postemergence control of the following weeds when used according to labeled directions:

Downy brome (Cheatgrass)- <i>Bromus tectorum</i>	Bulbous bluegrass- <i>Poa bulbosa</i>
Volunteer wheat - <i>Triticum aestivum</i>	Jointed goatgrass- <i>Aegilops cylindrica</i>
Volunteer barley - <i>Hordeum vulgare</i>	Common rye - <i>Secale cereale</i>

DOSAGE RATE AND TIMING

Apply KERB 50-W herbicide in a single application at a rate of 0.5 to 1.0 pounds (0.25 to 0.50 pound active ingredient) per acre. For optimum weed control, apply KERB 50-W herbicide between mid-September and mid-December, prior to soil freeze-up. Applications made outside these dates could result in poor weed control.

APPLICATION

Mix the recommended amount of KERB 50-W herbicide in clean water and apply uniformly in a broadcast application. For ground application KERB 50-W herbicide should be applied in 10 to 20 gallons of water per acre with a conventional low pressure herbicide sprayer equipped with flat fan nozzles. For aerial applications apply in a coarse droplet spray at 5 to 10 gallons per acre. Spray equipment should be carefully calibrated before each use.

ROTATIONAL CROPS

Winter wheat, barley and oats can be planted into fallow land treated with KERB 50-W 9 months (270 days) or more after application.

FALLOW LAND - SPECIFIC USE RESTRICTIONS

- Do not plant winter wheat, barley or oats within 270 days of the application of KERB 50-W herbicide.
- Do not use any fall tillage prior to or after the application of KERB 50-W herbicide.

TANK MIXTURE WITH GLEAN(R) HERBICIDE FOR FALLOW LAND

For control or suppression of certain broadleaf weeds not controlled by KERB 50-W herbicide in fallow land areas, Glean herbicide may be tank mixed with KERB 50-W. See Glean label for list of weeds claimed.

DOSAGE

Use KERB 50-W herbicide at the rate of 0.5 to 0.75 pound (0.25 to 0.38 lb. active ingredient) per acre tank mixed with Glean herbicide at 1/3 ounce of product per acre (when soil pH is 6.6 to 7.5) or 1/3 to 1/2 ounce of product per acre (when soil pH is 6.5 or less).

Important: Before applying a tank mixture of KERB 50-W and Glean herbicides on fallow land areas, read and observe all label directions for each product. Use rates and plant back restrictions should be strictly followed or severe injury to the following small grain crops may occur. In interpreting product labels for tank mixtures, the most restrictive situations must apply.

For crop rotation flexibility, do not use Glean herbicide on all your fallow acreage.

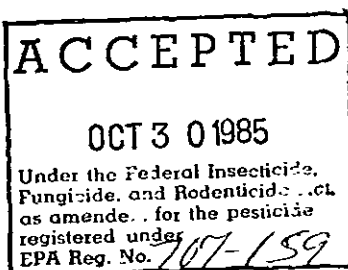
ROHM AND HAAS COMPANY

INDEPENDENCE MALL WEST

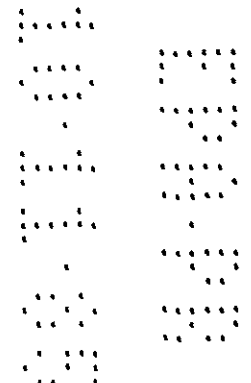
PHILADELPHIA, PENNSYLVANIA 19105



KERB(R) 50-W Herbicide in Water Soluble Pouches
EPA Reg. No. 707-159



Revised Labeling



ROHM AND HAAS COMPANY

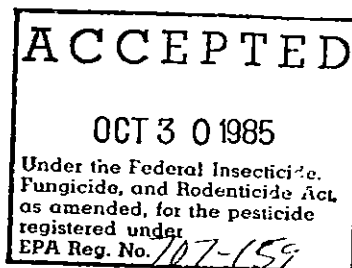
INDEPENDENCE MALL WEST

PHILADELPHIA, PENNSYLVANIA 19105



KERB^(R) 50-W HERBICIDE

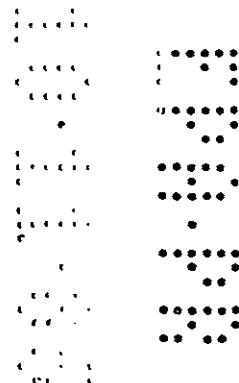
EPA REG. NO. 707-159
EPA EST. NO. 33967-NJ-1



General Information Section of Label

Changes to Direction No. 3 (third paragraph) under heading "Rotation Crop Planting Information".

Where small grains or grasses will be planted within one year to areas where KERB 50-W is to be applied at a dosage rate greater than 1.0 pound of product per acre, KERB 50-W herbicide should not be broadcast. Treatments should be limited to band or bed-top applications only.



ROHM AND HAAS COMPANY

INDEPENDENCE MALL WEST
PHILADELPHIA, PENNSYLVANIA 19105

EPA REG. NO. 707-159-AA
EPA EST. NO. 33961-NJ-1



ACCEPTED

OCT - 3 1985

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 707-159

SUPPLEMENTAL LABELING FOR KERB[®] 50-W HERBICIDE USE IN WOODY ORNAMENTALS, NURSERY STOCK AND CHRISTMAS TREES

DIRECTIONS FOR USE

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

NOTICE: Before using this product, read the entire Precautionary Statements, Conditions of Sale and Warranty, Directions for Use, Use Precautions and Storage and Disposal Instructions on side panels and attached use directions. If the Conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

GENERAL INFORMATION

KERB 50-W is a selective herbicide recommended for fall applications to established woody ornamentals, nursery stock and Christmas trees for the control of winter annual and perennial grasses and certain broadleaf weeds.

CROP TOLERANCE

At recommended rates of KERB 50-W herbicide the following trees and shrubs are tolerant to topical applications made in the fall:

Ash	Firethorn	Mountain Ash
Arborvitae	Flowering Cherry	Mountain Laurel
Azalea	Flowering Crabapple	Ohio Buckeye
Barberry	Flowering Quince	Oak
Casswood	Forsythia	Pine
Beech	Ginko	Poplar
Birch	Hawthorn	Privet
Boxwood	Hemlock	Rhododendron
Bradford Pear	Holly	Spirea
Cedar	Honey Locust	Spruce
Cotonester	Juniper	Sweetgum
Dogwood	Lilac	Sycamore
Douglas Fir	Linden	Tuliptree
Eastern Redbud	London Plane	Viburnum
Elm	Magnolia	Walnut
Euonymus	Maple	Willow
Fir	Mock Orange	Yew

KERB 50-W herbicide should only be used on established trees and woody ornamentals. KERB 50-W herbicide is not recommended for use on seedling trees or shrubs less than one year old or to fall transplanted stock transplanted less than one year or to spring transplanted stock transplanted less than six months.

WEED CONTROL

KERB 50-W herbicide is effective in fall applications at the rate of 2.0 to 4.0 pounds of product (1.0 to 2.0 pounds active ingredient) per treated acre for the preemergence and postemergence control of susceptible winter annual and perennial grasses and chickweed and for preemergence control only of other broadleaf weeds listed on this label. Refer to chart in dosage rate section below for specific weeds controlled.

DOSAGE AND TIMING

KERB 50-W herbicide is recommended in a single, fall application, either directed or topically applied, to woody ornamentals, nursery stock or Christmas trees at the rate of 2.0 to 4.0 pounds of product (1.0 to 2.0 pounds active ingredient) per treated acre. Application of KERB 50-W herbicide should be made in the fall prior to leaf drop and soil freeze-up. For control of winter annual or perennial grasses or chickweed, applications can be made either preemergence or postemergence to the weeds. For control of other labeled broadleaf weeds, preemergence applications must be used to achieve control. The dosage rate required will depend on the weed species present in the area to be treated. Follow the weed control recommendations given in the chart below:

<u>Weeds Controlled</u>		<u>Pounds KERB 50-W Per Acre Broadcast Application</u>
Barley, Foxtail	Grain Volunteer	2.0
Bluegrass, Annual	Ryegrass, Italian	
Brome, Downy		
(Cheatgrass)		
Chickweed	Sorrel, Red (from seed)	
Mustard, Wild	Shepherdspurse	3.0
Rocket, London		
Bluegrass, Kentucky	Ryegrass, Perennial	4.0
Orchardgrass		
Quackgrass		

APPLICATION

Mix the recommended amount of KERB 50-W herbicide in clean water and apply uniformly in 20 to 50 gallons per acre. Use a low pressure ground sprayer equipped with flat fan nozzles spaced to provide uniform distribution.

Dosage recommendations listed on this label are for surface broadcast application. For banded treatments down the row, the amount of KERB 50-W used per acre should be reduced according to the following formula:

$$\frac{\text{Band width (in.)}}{\text{Row width (in.)}} \times \text{Rate per Acre Broadcast} = \text{Amount Needed per Acre for Band Application}$$

KERB 50-W herbicide should not be soil incorporated.

"Note - Most ornamental turf grass species and ground covers are sensitive to KERB 50-W. Care should be exercised to avoid contact of KERB 50-W herbicide with these plants from either direct application, spray drift or from applications to areas that may drain onto established ornamental turf and ground covers."

SOIL AND MOISTURE REQUIREMENTS

KERB 50-W herbicide is most active in coarse to medium textured soils of low organic matter and is relatively inactive in peat or muck soils or mineral soils high in organic matter content at rates recommended in this label. Herbicidal activity is best in soils containing less than 4 percent organic matter. Use in soils of higher organic matter content may result in inconsistent or incomplete weed control.

KERB 50-W herbicide acts mainly through root absorption in sensitive weed species. Dependable rainfall or overhead irrigation is essential following application for effective weed control.

Woody Ornamentals, Nursery Stock and Christmas Trees SPECIFIC USE RESTRICTIONS

- Apply KERB 50-W herbicide in the fall prior to soil freeze-up.
- Do not soil incorporate KERB 50-W herbicide.

IMPORTANT

All applicable directions, restrictions and precautions on the EPA registered label are to be followed. This label must be in the possession of the user at the time of application.

CONDITIONS OF SALE AND WARRANTY

Rohm and Haas warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Handling, storage and use of the product by Buyer or User are beyond the control of Rohm and Haas and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property or failure to follow label directions will be assumed by the Buyer or User. IN NO CASE WILL ROHM AND HAAS OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.

KERB is a registered trademark of the Rohm and Haas Company.

ENJ:fs
(Doc. #3738H/366Z)
9/6/85

ROHM AND HAAS COMPANY

INDEPENDENCE MALL WEST
PHILADELPHIA, PENNSYLVANIA 19105



EPA Reg. No. 707-159

ACCEPTED

JUL 23 1985

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 707-159

SUPPLEMENTAL LABELING FOR KERB 50-W HERBICIDE: USE ON SUMMER FALLOW LAND
WHICH WILL BE PLANTED BACK TO WINTER WHEAT, BARLEY, OR OATS

TANK MIXTURE WITH GLEAN^R HERBICIDE

FALLOW LAND

For control or suppression of certain broadleaf weeds not controlled by KERB^R 50-W herbicide in fallow land areas, Glean herbicide may be tank mixed with KERB 50-W. See Glean label for list of weeds claimed.

Rate: Use KERB 50-W herbicide at the rate of 0.5 to 0.75 pound (0.25 to 0.38 lb. active ingredient) per acre tank mixed with Glean herbicide at 1/3 ounce of product per acre (when soil pH is 6.6 to 7.5) or 1/3 to 1/2 ounce of product per acre (when soil pH is 6.5 or less).

Important: Before applying a tank mixture of KERB 50-W and Glean herbicides on fallow land areas, read and observe all label directions for each product. Use rates and plant back restrictions should be strictly followed or severe injury to the following small grain crops may occur. In interpreting product labels for tank mixtures, the most restrictive situations must apply.

For crop rotation flexibility, do not use Glean herbicide on all your fallow acreage.

GLEAN is a registered trademark of the E. I. duPont de Nemours & Company, Inc.

(5805E/199Z)

15-46

ROHM AND HAAS COMPANY

INDEPENDENCE MALL WEST

PHILADELPHIA, PENNSYLVANIA 19105



KERB(R) 50-W Herbicide (707-159)
Spring Use Directions for Established Alfalfa
Revised Label

ACCEPTED

APR - 8 1985

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 707-159

The attached text will replace the "Spring Use Directions
for Established Alfalfa" portion of the "Legumes Grown for
Forage and Seed-" section of the KERB 50-W herbicide label
as indicated on the 2nd page.

2964E/282Z

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Proposed Labeling

SPRING USE DIRECTIONS FOR ESTABLISHED ALFALFA

DODDER CONTROL IN ALFALFA SEED CROPS ONLY
IN CALIFORNIA, IDAHO, NEVADA, OREGON, UTAH
AND WASHINGTON

GENERAL INFORMATION

For effective control KERB 50-W herbicide must be moved into the soil either by rainfall or irrigation before the germination of dodder. Preferably, irrigation should be made within 1 to 3 days following the KERB application, but can be delayed up to 2 weeks if necessary provided that irrigation precedes dodder germination. If irrigation of the field treated with KERB 50-W herbicide must be delayed, a light mechanical incorporation (maximum 1 inch depth) should follow the KERB application and the field irrigated within two weeks.

When using flood type or overhead sprinkler irrigation systems the amount of irrigation following the KERB application should not exceed one inch of water. Excess irrigation following the KERB application and prior to germination of dodder may decrease the effectiveness of KERB 50-W herbicide.

DOSAGE AND TIMING

For effective control KERB 50-W herbicide must be applied before dodder germinates. Follow directions given below depending on method of irrigation used:

Furrow Irrigation - Apply KERB 50-W at the rate of 3.0 to 4.0 pounds of product (1.5 to 2.0 pounds active ingredient) per acre. Incorporate lightly at time of application and irrigate within seven days.

Flood Irrigation - Apply KERB 50-W at the rate of 3.0 pounds of product (1.5 pounds active ingredient) per acre. Flood field with 0.5 to 1.0 inch of water within 1 to 3 days after application.

Overhead Sprinkler Irrigation - Use same directions as given above for flood irrigation.

NOTE: If the legume crop treated with KERB 50-W herbicide should be winter killed or otherwise destroyed, do not plant the field in the spring to small grain or grass crops since these crops may be injured from residual KERB in the soil. For additional information see Rotation Crop Planting Chart in the General Information section of this label.

DIRECTIONS FOR USE

LEGUMES GROWN FOR FORAGE AND SEED — ALFALFA, CLOVER, BIRDSFOOT TREFOIL, CROWN VETCH AND SAINFOIN

GENERAL INFORMATION

KERB 50-W is a selective herbicide recommended for fall or winter applications to alfalfa, clover, birdsfoot trefoil, crown vetch and sainfoin for both preemergence and postemergence control of susceptible winter annual and perennial grasses and for preemergence control of certain broadleaf weeds

DOSAGE

KERB 50-W herbicide is recommended at the rate of 1.0 to 4.0 pounds of product (0.5 to 2.0 pounds active ingredient) per broadcast acre application. The required rate will depend on the weed species present as well as the type of irrigation used or the dependability of rainfall following application. The effective rate will be higher in low rainfall areas or where furrow irrigation is used than in areas of dependable rainfall or where overhead irrigation is practiced. Follow the weed control recommendations given in the chart below for fall or winter applications of KERB 50-W herbicide.

		Pounds KERB 50-W Per Acre Broadcast Application	
		Dependable Rainfall or Overhead Irrigation	Low Rainfall or Furrow Irrigation
Weeds Controlled			
Apply Preemergence or Postemergence to These Weeds:			
Barley, Foxtail	Grain Volunteer		
Bluegrass, Annual	Oat, Wild	1.0-1.5	1.5-2.0
Brome, Downy (Cheatgrass)	Ryegrass, Italian		
Chickweed			
Bluegrass, Kentucky		1.5-2.0	2.0-3.0
Orchardgrass			
Ryegrass, Perennial			
Quackgrass		2.0-3.0	3.0-4.0
Apply Preemergence Only to These Weeds:			
Sorrel, Red (from Seed)		1.5-2.0	2.0-3.0
Mustard, Wild	Rocket, London	3.0	4.0
Radish, Wild	Shepherdspurse		

For control of spring germinating dodder refer to specific instructions under Spring Use Directions for Established Alfalfa.

TIMING AND APPLICATION

KERB 50-W herbicide should be applied during the fall or winter months. Optimum herbicidal activity occurs when applications are made under cool temperature conditions (55°F or less) and are followed by rainfall or overhead irrigation. Applications should always be made BEFORE SOIL FREEZE-UP.

Applications are recommended postemergence to established, actively growing or dormant forage legumes or to new plantings after the legume has reached the trifoliate leaf stage. In established forage legume stands, applications should be made after the last cutting when the weather and soil temperatures are cool. In fall-seeded forage legumes, applications should be made after legumes have reached the trifoliate leaf stage. In spring-seeded forage legumes, applications of KERB 50-W herbicide should be made the following fall or early winter to control winter annual and perennial grasses

Do not use KERB 50-W herbicide as a preplant or preemergence treatment or before the trifoliate leaf stage of the legume has developed in new plantings as injury to the legume stand may result. Remove or disperse trash, crop residues and ashes before treatment.

Mix the recommended amount of KERB 50-W herbicide in clean water and apply uniformly with a ground sprayer at 20 to 50 gallons per acre. Use a conventional herbicide sprayer equipped with flat fan nozzles at 40 to 60 psi.

ROTATION CROPS

Where rotation crops are to follow within one year of the KERB 50-W herbicide treatment to alfalfa, clover, birdsfoot trefoil, crown vetch or sainfoin, follow the directions given in the General Information section of this label under ROTATION CROP PLANTING INFORMATION.

SPECIFIC USE RESTRICTIONS — ALFALFA, CLOVER, BIRDSFOOT TREFOIL, CROWN VETCH AND SAINFOIN

- Do not use more than 4.0 pounds KERB 50-W herbicide per acre per season.
- Do not graze or harvest for forage or dehydration within the following intervals after application:

Alfalfa — below 3.0 pounds KERB 50-W/A (West of Mississippi River)	— 25 days
Alfalfa — 3.0 to 4.0 pounds KERB 50-W/A (West of Mississippi River)	— 45 days
Clover, birdsfoot trefoil, crown vetch, sainfoin (entire U.S.) and alfalfa (East of Mississippi River) up to 4.0 pounds KERB 50-W/A	— 120 days

NOTE: The above restrictions do not apply to these crops grown for seed production only.

SPRING USE DIRECTIONS FOR ESTABLISHED ALFALFA —

DODDER CONTROL IN ALFALFA SEED CROPS ONLY IN CALIFORNIA, IDAHO, NEVADA, OREGON, UTAH AND WASHINGTON

GENERAL INFORMATION

Spring applications of KERB 50-W herbicide are effective for the preemergence control of dodder. Use is restricted to established alfalfa seed crops in California, Idaho, Nevada, Oregon, Utah and Washington.

DOSAGE AND TIMING

For effective control, KERB 50-W herbicide must be applied before dodder germinates. Follow directions given below depending on method of irrigation used.

Furrow Irrigation — Apply KERB 50-W at the rate of 3.0 to 4.0 pounds of product (1.5 to 2.0 pounds active ingredient) per acre. Incorporate lightly at time of application and irrigate within seven days.

Flood Irrigation — Apply KERB 50-W at the rate of 3.0 pounds of product (1.5 pounds active ingredient) per acre. Flood field within 1-3 days after application.

Use the standard quantities of irrigation water recommended in your area. Excess irrigation may decrease the effectiveness of KERB 50-W herbicide.

NOTE: If the legume crop treated with KERB 50-W herbicide should be winter-killed or otherwise destroyed, do not plant the field in the spring to small grain or grass crops since these crops may be injured from residual KERB in the soil. For additional information see Rotation Crop Planting Chart in the General Information section of this label.

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LABEL SECTION TO BE REVISED

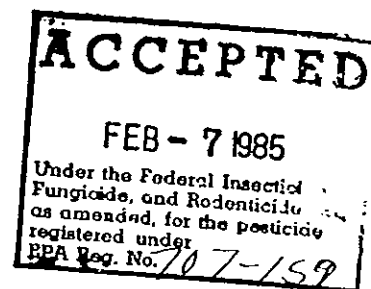
1-25-86

ROHM AND HAAS COMPANY

INDEPENDENCE MALL WEST
PHILADELPHIA, PENNSYLVANIA 19105



KERB(R) 50-W Herbicide (707-159)
Legumes Grown for Forage and Seed
Revised Grazing Interval Restrictions



Revised Label

We propose to delete

"The statement indicated on the attached "Legumes Grown for Forage and Seed" section of our latest EPA approved label.

TDR:me1
(7253E/36Z)
1/24/85

1-25-86

DIRECTIONS FOR USE

LEGUMES GROWN FOR FORAGE AND SEED — ALFALFA, CLOVER, BIRDSFOOT TREFOIL, CROWN VETCH AND SAINFOIN

GENERAL INFORMATION

KERB 50-W is a selective herbicide recommended for fall or winter applications to alfalfa, clover, birdsfoot trefoil, crown vetch and sainfoin for both preemergence and postemergence control of susceptible winter annual and perennial grasses and for preemergence control of certain broadleaf weeds.

DOSAGE

KERB 50-W herbicide is recommended at the rate of 1.0 to 4.0 pounds of product (0.5 to 2.0 pounds active ingredient) per broadcast acre application. The required rate will depend on the weed species present as well as the type of irrigation used or the dependability of rainfall following application. The effective rate will be higher in low rainfall areas or where furrow irrigation is used than in areas of dependable rainfall or where overhead irrigation is practiced. Follow the weed control recommendations given in the chart below for fall or winter applications of KERB 50-W herbicide.

		Pounds KERB 50-W Per Acre Broadcast Application	
Weeds Controlled		Dependable Rainfall or Overhead Irrigation	Low Rainfall or Furrow Irrigation
Apply Preemergence or Postemergence to These Weeds:			
Barley, Foxtail	Grain Volunteer:		
Bluegrass, Annual	Oat, Wild	1.0-1.5	1.5-2.0
Brome, Downy (Cheatgrass)	Ryegrass, Italian		
Chickweed			
Bluegrass, Kentucky		1.5-2.0	2.0-3.0
Orchardgrass			
Ryegrass, Perennial			
Quackgrass		2.0-3.0	3.0-4.0
Apply Preemergence Only to These Weeds:			
Sorrel, Red (from Seed)		1.5-2.0	2.0-3.0
Mustard, Wild	Rocket, London	3.0	4.0
Radish, Wild	Shepherdspurse		

For control of spring germinating dodder refer to specific instructions under Spring Use Directions for Established Alfalfa.

TIMING AND APPLICATION

KERB 50-W herbicide should be applied during the fall or winter months. Optimum herbicidal activity occurs when applications are made under cool temperature conditions (55°F or less) and are followed by rainfall or overhead irrigation. Applications should always be made BEFORE SOIL FREEZE-UP.

Applications are recommended postemergence to established, actively growing or dormant forage legumes or to new plantings after the legume has reached the trifoliate leaf stage. In established forage legume stands, applications should be made after the last cutting when the weather and soil temperatures are cool. In fall-seeded forage legumes, applications should be made after legumes have reached the trifoliate leaf stage. In spring-seeded forage legumes, applications of KERB 50-W herbicide should be made the following fall or early winter to control winter annual and perennial grasses.

Do not use KERB 50-W herbicide as a preplant or preemergence treatment or before the trifoliate leaf stage of the legume has developed in new plantings as injury to the legume stand may result. Remove or disperse trash, crop residues and ashes before treatment.

Mix the recommended amount of KERB 50-W herbicide in clean water and apply uniformly with a ground sprayer at 20 to 50 gallons per acre. Use a conventional herbicide sprayer equipped with flat fan nozzles at 40 to 60 psi.

ROTATION CROPS

Where rotation crops are to follow within one year of the KERB 50-W herbicide treatment to alfalfa, clover, birdsfoot trefoil, crown vetch or sainfoin, follow the directions given in the General Information section of this label under ROTATION CROP PLANTING INFORMATION.

SPECIFIC USE RESTRICTIONS — ALFALFA, CLOVER, BIRDSFOOT TREFOIL, CROWN VETCH AND SAINFOIN

- Do not use more than 4.0 pounds KERB 50-W herbicide per acre per season.
- Do not graze or harvest for forage or dehydration within the following intervals after application:

Alfalfa — below 3.0 pounds KERB 50-W/A (West of Mississippi River)	— 25 days
Alfalfa — 3.0 to 4.0 pounds KERB 50-W/A (West of Mississippi River)	— 45 days
Clover, birdsfoot trefoil, crown vetch, sainfoin (entire U.S.) and alfalfa (East of Mississippi River) up to 4.0 pounds KERB 50-W/A	— 120 days

NOTE: The above restrictions do not apply to these crops grown for seed production only.

SPRING USE DIRECTIONS FOR ESTABLISHED ALFALFA —

DODDER CONTROL IN ALFALFA SEED CROPS ONLY IN CALIFORNIA, IDAHO, NEVADA, OREGON, UTAH AND WASHINGTON

GENERAL INFORMATION

Spring applications of KERB 50-W herbicide are effective for the preemergence control of dodder. Use is restricted to established alfalfa seed crops in California, Idaho, Nevada, Oregon, Utah and Washington.

DOSAGE AND TIMING

For effective control, KERB 50-W herbicide must be applied before dodder germinates. Follow directions given below depending on method of irrigation used.

Furrow Irrigation — Apply KERB 50-W at the rate of 3.0 to 4.0 pounds of product (1.5 to 2.0 pounds active ingredient) per acre. Incorporate lightly at time of application and irrigate within seven days.

Flood Irrigation — Apply KERB 50-W at the rate of 3.0 pounds of product (1.5 pounds active ingredient) per acre. Flood field within 1-3 days after application.

Use the standard quantities of irrigation water recommended in your area. Excess irrigation may decrease the effectiveness of KERB 50-W herbicide.

NOTE: If the legume crop treated with KERB 50-W herbicide should be winter killed or otherwise destroyed, do not plant the field in the spring to small grain or grass crops since these crops may be injured from residual KERB in the soil. For additional information see Rotation Crop Planting Chart in the General Information section of this label.

ROHM AND HAAS COMPANY

INDEPENDENCE MALL WEST

PHILADELPHIA, PENNSYLVANIA 19105



KERBR 50-W Herbicide (707-159)
Revised Labeling
Plantback Restriction

The following statement will be inserted in the ROTATION CROP PLANTING INFORMATION section of the KERB label at the location indicated on the attachment:

"NOTE: Crops not listed in Crop Groups A,B,C, or D (above) should not be planted back sooner than 12 months after the last KERB herbicide application regardless of the rate of KERB used."

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EPA Reg. No. 707-159

WEEDS CONTROLLED ONLY PREEMERGENCE

BARNYARDGRASS
CANARYGRASS
CARPETWEED
CRABGRASS, LARGE
DODDER, FIELD
FOXTAIL, YELLOW
GOOSEGRASS
GOOSEFOOT, NETTLELEAF
HENBIT
KNOTWEED, PROSTRATE
LAMBSQUARTERS, COMMON
LOVEGRASS
ROCKET, LONDON
MALLOW, LITTLE (CHEESEWEED)
MORNINGGLORY, ANNUAL
MUSTARD, WILD
NETTLE, BURNING
NIGHTSHADE, BLACK
NIGHTSHADE, HAIRY
PANICUM, FALL
PURSLANE, COMMON
SHEPHERDSPURSE
SMARTWEED, PALE
SORREL, RED (from seed)
TOMATO, VOLUNTEER
RADISH, WILD

Echinochloa crus-galli
Phalaris canariensis
Mollugo verticillata
Digitaria sanguinalis
Cuscuta campestris
Setaria lutescens
Eleusine indica
Chenopodium murale
Lamium amplexicaule
Polygonum aviculare
Chenopodium album
Eragrostis diffusa
Sisymbrium irio
Malva parviflora
Ipomoea purpurea
Brassica kaber
Urtica urens
Solanum nigrum
Solanum sarachoides
Panicum dichotomiflorum
Portulaca oleracea
Capsella bursa-pastoris
Polygonum lapathifolium
Rumex acetosella
Solanum esculentum
Raphanus sativus

NOTE: The weed species controlled by KERB 50-W herbicide are dependent on the rate used, specific crop culture involved, and the associated conditions of temperature, soil type and moisture availability. Refer to specific crop use directions for weed species controlled.

DOSAGE

The rate of KERB 50-W herbicide required will vary depending on the crop culture involved and weed species to be controlled. See specific crop use directions for all dosage recommendations. All dosage recommendations listed in this label are in terms of pounds KERB 50-W herbicide per broadcast acre. For banded application, the amount of KERB 50-W herbicide used per acre should be reduced according to the following formula:

$$\frac{\text{Band width (in)}}{\text{Row width (in)}} \times \text{Rate Per Acre Broadcast} = \text{Amount needed per Acre for Band Application}$$

TIMING AND APPLICATION

Unless specific directions are given under the crop to be treated, KERB 50-W herbicide should be applied in the fall or early winter, when temperatures do not exceed 55°F, BUT PRIOR TO SOIL FREEZE UP. Best weed control results when KERB 50-W herbicide is applied preemergence to the weeds and when application is followed by rainfall or irrigation to move the product into the root zone of the germinating weeds.

KERB 50-W herbicide should be thoroughly mixed in clean water at the recommended concentration and applied uniformly as a spray. For ground application, use a conventional low pressure herbicide sprayer equipped with flat fan nozzles spaced and calibrated to uniformly deliver 20 to 50 gallons of spray per acre. For aerial applications apply in a coarse droplet spray at 5 to 10 gallons per acre. Accurately calibrate spray equipment prior to each use.

EFFECT OF SOIL TYPE, MOISTURE AND TEMPERATURE

KERB 50-W herbicide is most active in coarse to medium textured soils of low organic matter and is relatively inactive in peat or muck soils or mineral soils high in organic matter content at rates recommended in this label. Herbicidal activity is best in soils containing less than 4 percent organic matter. Use in soils with higher organic matter may result in inconsistent or incomplete weed control.

The herbicidal activity of KERB 50-W herbicide is mainly through root absorption in sensitive weed species. Rain, melting snow or irrigation is ESSENTIAL following treatment to move KERB 50-W herbicide into the root zone of germinating weeds.

Under field conditions, KERB 50-W herbicide will remain relatively stable with little loss of herbicidal activity when soil temperatures are less than 55°F. As soil temperatures increase, degradation of the active ingredient takes place. KERB 50-W herbicide may degrade rather quickly if left exposed on the soil surface in warm weather. If KERB 50-W herbicide is applied when air temperatures exceed 85°F, it should be soil incorporated to a shallow depth (top two to three inches) or watered into the soil as soon as possible.

CULTURAL CONSIDERATIONS

For best results apply KERB 50-W to a trash free soil surface. Clean cultivation before application is preferable, but not necessary. To obtain optimum weed control in areas not clean cultivated, the area to be treated should be free of surface litter (dead or decaying crop and weed debris, mowing clippings, etc.). Trash free areas create ideal conditions for rapid movement of KERB 50-W into the weed root zone following rain or irrigation.

ROTATION CROP PLANTING INFORMATION

Follow the directions given below when rotation crops will be planted to areas previously treated with KERB 50-W herbicide.

- Whether KERB 50-W herbicide is bed-topped, banded or broadcast, the beds should be knocked down and the field cross-diced before rotation crops other than artichokes, lettuce, endive or escarole are planted.
- Where the KERB 50-W herbicide treatment is to be followed by a rotation crop within six months of application, bed-topped or banded applications are suggested.
- Where small grains or grasses will be planted within one year to areas where KERB 50-W herbicide is to be applied at a dosage rate of 1.0 pound of product per acre or higher, KERB 50-W herbicide should not be broadcast. Treatments should be limited to band or bed-top applications only.
- Where rotation crops are to follow within one year of the KERB 50-W herbicide treatment, the following rotational plan applies:

Amount of KERB 50-W Applied, Planted Acre ¹	Waiting Period in Months Before Planting the Crops Indicated ²			
	Group A	Group B	Group C	Group D
1.0 lb.	0	3	3	6
2.0 lb.	0	3	4	9
3.0 lb.	0	4	6	9
4.0 lb.	0	5	7	12

¹Crop Group A — Artichokes, lettuce, endive, escarole

Crop Group B — Beans, corn, cotton, sorghum, carrots, celery

Crop Group C — Broccoli, cabbage, cauliflower, cucumbers, spinach, sugar-beets, onion, tomatoes

Crop Group D — Wheat, barley, oats, grasses

NOTE:

²Planted Acre refers to Acreage planted. KERB at 4.0 pounds of product per treated acre on two 5 inch treated bands (40 inch centers) is the equivalent of one pound KERB 50-W per planted acre. KERB at 4.0-pounds of product as a broadcast treatment (total acreage sprayed) is the equivalent of 4 pounds of KERB 50-W per planted acre.

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ROHM AND HAAS COMPANY

INDEPENDENCE MALL WEST
PHILADELPHIA, PENNSYLVANIA 19105

KERB 50W Herbicide
Use Directions for
Globe Artichokes
EPA Reg. No. 707-159-AA
EPA Est. No. 335-60-TN-1



KERB 50W

DIRECTIONS FOR USE

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

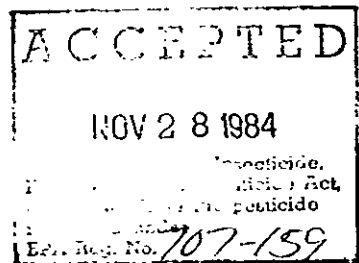
GLOBE ARTICHOKE

KERB 50W is a selective herbicide for the control of weeds in either established (ratoon) or transplanted globe artichokes.

WEEDS CONTROLLED

KERB 50W is generally effective at 4.0 to 8.0 pounds of product (2.0 to 4.0 pounds active ingredient) per acre for the preemergence control of annual bluegrass, foxtail grass species, ryegrass, volunteer grains and wild oats, and broadleaf weed species including burning nettle, cheeseweed, chickweed, henbit, knotweed, wild mustard, nettleleaf goosefoot, and hairy nightshade.

DOSAGE RATE RECOMMENDATIONS



KERB 50W Rate
(Per Broadcast Acre)*

<u>Crop</u>	<u>Weeds</u>	<u>KERB 50W Rate (Per Broadcast Acre)*</u>		<u>Comments</u>
		<u>Dependable Rainfall or Overhead Irrigation</u>	<u>Less Dependable Rainfall or Furrow Irrigation</u>	
Globe Artichokes (established ratoon)	Susceptible annual grasses, volunteer grains and broad- leaf weeds	4.0 lbs.	Not recommended	Sandy soils, sandy loams and silt loams Silt, silty clay loams, clay loams and clay soils
		8.0 lbs.	Not recommended	
Globe Artichokes (newly transplanted crowns)	Susceptible annual grasses, volunteer grains and broad- leaf weeds	4.0 lbs.	Not recommended	All soil types except peat and muck soils

*Dosage recommendations listed on this label are in terms of pounds KERB 50W per acre broadcast application. For banded treatments down artichoke rows or between rows, the amount of KERB 50W used per acre should be reduced according to the following formula:

$$\frac{\text{band width (in.)}}{\text{row width (in.)}} \times \text{Rate Per Acre Broadcast} = \text{Amount needed per Acre for Band Application}$$

USE PRECAUTIONS

- Do not apply more than 8.0 pounds of KERB 50W to established artichokes or more than 4.0 pounds of KERB 50W to newly transplanted artichokes per acre in one season.
- Do not make more than one application to the artichoke row in one season.
- Do not harvest artichokes within 60 days of the first application (over the plant rows) or within 1 day of the second application (to the untreated area between rows after ditching).

DOSAGE AND TIMING RECOMMENDATIONS

Established Ratoon Artichokes

Apply KERB 50W in a single postemergence application to the crop after tillage operations are completed and shoot regrowth of the artichokes has occurred. Application timing of KERB should be preemergence to the weeds and before new artichoke leaves are greater than 14 to 16 inches long. Apply KERB 50W in a banded treatment over the crop row at the rate of 4.0 to 8.0 pounds of product per broadcast acre (see dosage rate for soil type in chart). A second application of KERB 50W at the same rate may be applied in a banded treatment directed to the untreated soil surface between the artichoke rows after the ditching operation is completed later in the season.

Transplanted Artichoke Crowns

Apply KERB 50W in a single application after transplanting the crowns but before new shoots have developed 3 to 4 new leaves. KERB 50W should be applied preemergence to the weeds and banded over the crop row at the rate of 4.0 pounds of product per broadcast acre. Do not use higher rates of KERB 50W than 4.0 pounds per acre in one season. A second application of KERB 50W at the same rate may be applied in a banded treatment directed to the untreated soil surface between the artichoke rows after the ditching operation is completed later in the season.

APPLICATION

Mix KERB 50W in clean water and apply with a ground sprayer in 20 to 50 gallons per acre. Reduce dosage and volume accordingly for banded treatments. Use a standard low pressure herbicide sprayer with flat fan nozzles that give uniform spray distribution.

SOIL MOISTURE AND IRRIGATION REQUIREMENTS

Moisture is necessary to activate KERB in the soil and move it into the root zone of the germinating weeds. Natural rainfall or supplementary overhead irrigation within 1 to 3 days after KERB application is essential for effective weed control. For best results use overhead sprinkler irrigation equipment to irrigate the field with 1 to 2 inches of water after the KERB application.

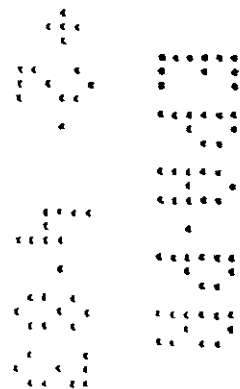
EFFECT OF SOIL TYPE

KERB is not recommended for use on highly organic or muck soils because herbicidal activity is lowered significantly in these soils. Follow dosage rates suggested in the dosage recommendations chart according to the soil type for established and transplanted artichokes.

ROTATION CROPS

Artichokes are generally long term perennial crops. In the event that artichokes are discontinued and a rotational crop will be planted within one year where KERB 50W was applied at the rate of 4.0 pounds of product per acre, follow the crop rotational plan outlined on this label for lettuce. If artichokes are discontinued where KERB 50W was applied at a dosage rate greater than 4.0 pounds of product per acre, do not plant back to crops other than artichokes for a period of 18 months.

ENI/cap
1239E/272Z





SUPPLEMENTAL LABELING FOR KERB[®] 50-W HERBICIDE
USE ON FALLOW LAND

DIRECTIONS FOR USE

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

NOTICE: Before using this product, read the entire Precautionary Statements, Directions for Use and the Conditions of Sale and Warranty. If the Conditions of Sale and Warranty are not acceptable, return product unopened within thirty days of purchase to place of purchase.

GENERAL INFORMATION

KERB 50-W is a selective herbicide for use on fallow land to control certain winter annual grasses and volunteer grains.

Use of the product is restricted to summer fallow land which will be planted back the following year to winter wheat, barley or oats.

Use rates and plant-back restrictions for KERB 50-W herbicide should be strictly followed or severe injury to the following small grain crop may occur.

KERB 50-W is a soil active herbicide that is absorbed through weed roots. In order to achieve good weed control, sufficient soil moisture from rain, melting snow or irrigation is required following treatment to move KERB into the soil to the weed root zone.

WEEDS CONTROLLED

KERB 50-W herbicide will provide preemergence and postemergence control of the following weeds when used according to labeled directions:

Downy brome (Cheatgrass)- <i>Bromus tectorum</i>	Bulbous bluegrass- <i>Poa bulbosa</i>
Volunteer wheat - <i>Triticum aestivum</i>	Jointed goatgrass- <i>Aegilops cylindrica</i>
Volunteer barley - <i>Hordeum vulgare</i>	Common rye - <i>Secale cereale</i>

DOSAGE RATE AND TIMING

Apply KERB 50-W herbicide in a single application at a rate of 0.5 to 0.75 pound (0.25 to 0.38 pound active ingredient) per acre. For optimum weed control, apply KERB 50-W herbicide between mid-October and mid-December, prior to soil freeze-up. Applications made outside these dates could result in poor weed control.

ACCEPTED

JUL 3 0 1984

Under Federal Insecticide,
Fungicide and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 707-159

APPLICATION

Mix the recommended amount of KERB 50-W herbicide in clean water and apply uniformly in a broadcast application. For ground application KERB 50-W herbicide should be applied in 10 to 20 gallons of water per acre with a conventional low pressure herbicide sprayer equipped with flat fan nozzles. Spray equipment should be carefully calibrated before each use.

ROTATIONAL CROPS

Winter wheat, barley and oats can be planted into fallow land treated with KERB 50-W 9 months (270 days) or more after application.

IMPORTANT

Follow all applicable directions, restrictions and precautions on the EPA-registered label.

This labeling must be in the possession of the user at the time of application.

CONDITIONS OF SALE AND WARRANTY:

Rohm and Haas warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Handling, storage and use of the product by Buyer or User are beyond the control of Rohm and Haas and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property or failure to follow label directions will be assumed by the Buyer or User. IN NO CASE WILL ROHM AND HAAS OR SELLER, BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.

Suggestions for uses and information relating to such uses contained herein do not constitute a recommendation, license or permission to use or infringe another party's patent.

KERB is a registered trademark of Rohm and Haas Company.

SEE FOLDER IN BOTTOM FLAP FOR USE DIRECTIONS

KERB® 50-W

A SELECTIVE HERBICIDE

IN WATER SOLUBLE POUCHES

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed. Take special care to avoid contact with eyes, skin or clothing. Do not breathe the dust or spray mist. Wash clothing and gloves after use.

STATEMENTS OF PRACTICAL TREATMENT

IF SWALLOWED: Dilute by giving 2 glasses of water to drink and call a physician. Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: Emesis is recommended.

IF INHALED: Move subject to fresh air.

IF ON SKIN: Wash affected skin areas with soap and water. Consult a physician if irritation persists.

IF IN EYES: Flush eyes with large amounts of water for at least 15 minutes. Consult a physician if irritation persists.

PROTECTIVE CLOTHING: Use the following items of clothing when mixing or applying this product: long-sleeved shirts and long pants, preferably one-piece (overalls); hat with brim; heavy-duty fabric or rubber work gloves. Use heavy-duty leather or rubber boots when applying with hand spray equipment.

ENVIRONMENTAL HAZARDS

Keep out of lakes, ponds or streams. Do not contaminate water by cleaning of equipment or disposal of wastes.

NOTICE: Before using this product, read the entire Precautionary Statements, Conditions of Sale and Warranty, Directions for Use, Use Restrictions and Storage and Disposal Instructions on back panel and attached use directions. If the conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

ACTIVE INGREDIENT

DICOFOL

3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-benzamide 50.0%

INERT INGREDIENTS

TOTAL

50.0%
100%

EPA REG. NO. 707-159
EPA EST. NO. 33967-NJ-1

U.S. Patent 3,534,098 and 3,640,699
Copyright 1983 Rohm and Haas Company

ACCEPTED

OCT 25 1983

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under
EPA Reg. No. 707-159



NET CONTENTS: 3X 1 LB WATER SOLUBLE POUCHES
3 LBS (1.36 KG)

CONDITIONS OF SALE AND WARRANTY

Rohm and Haas warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Crop injury, ineffectiveness or other unintended consequences resulting from such factors as failure to follow label directions, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property, handling, storage and manner of use are beyond the control of Rohm and Haas and Seller. All such risks will be assumed by the Buyer or User. In no case will Rohm and Haas or Seller be held liable for consequential, special or indirect damages resulting from the use or handling of this product.

DIRECTIONS FOR USE

General Classification

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

GENERAL INFORMATION

SEE FOLDER IN BOTTOM FLAP FOR USE DIRECTIONS.

MIXING: The enclosed pouches of KERB 50-W herbicide are water soluble. Do not allow pouches to become wet prior to adding to the spray tank. Do not handle the pouches with wet hands or gloves. Always reseal overwrap bag to protect remaining unused pouches. Do not remove water soluble pouches from overwrap except to add directly to the spray tank.

Add the required number of unopened pouches as determined by the dosage recommendations into the spray tank with agitation. Depending on the water temperature and the degree of agitation, the pouches should dissolve completely within approximately five minutes from the time they are added to the water:

DOSAGE: Refer to the specific crop for dosage recommendations. Determine the total amount of KERB 50-W to be added to the spray tank. For each pound of KERB 50-W, use one one-pound pouch.

Example: If two pounds of KERB 50-W should be added to the spray tank, add two one-pound pouches.

The type of equipment used will determine the concentration required; however, the use of these water soluble pouches is not recommended for making highly concentrated mixtures such as used in aircraft spraying unless pouches are premixed in nurse tanks with adequate agitation.

STORAGE AND DISPOSAL

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

STORAGE: Store in a cool, dry place but not below 32°F (0°C). Do not remove package from container except for immediate use.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Completely empty bag into application equipment. Then dispose of it in a sanitary landfill or by incineration, or, if allowed by State and local authorities by burning. If burned, stay out of smoke.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Sweep up and place in containers for recovery or disposal. Keep dusting to a minimum. Wear MSHA/NIOSH respirator for dusts encountered. Flush area with water. Keep spill out of all sewers and open bodies of water. Protective Clothing - see Precautionary Statements.

ROHM AND HAAS COMPANY

INDEPENDENCE MALL WEST
PHILADELPHIA, PENNSYLVANIA 19105



KERB 50-W HERBICIDE

USE DIRECTIONS FOR:

GLOBE ARTICHOKE (CALIFORNIA ONLY)
LETTUCE, ENDIVE AND ESCAROLE
LEGUMES FOR FORAGE AND SEED
ORNAMENTAL BERMUDAGRASS TURF
WOODY ORNAMENTALS, NURSERY STOCK AND CHRISTMAS TREES
TREE FRUIT (APPLE, CHERRY, NECTARINE, PEACH, PEAR, PLUM, PRUNE) AND GRAPES
BLUEBERRY (OREGON AND WASHINGTON ONLY)
RASPBERRY AND BLACKBERRY (OREGON AND WASHINGTON ONLY)

GENERAL CLASSIFICATION

NOTICE: Before using this product, read the entire Precautionary Statements, Conditions of Sale and Warranty, Directions for Use, Use Precautions and Storage and Disposal Instructions. If the conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

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

CONDITIONS OF SALE AND WARRANTY

Rohm and Haas warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Crop injury, ineffectiveness or other unintended consequences resulting from such factors as failure to follow label directions, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property, handling, storage and manner of use are beyond the control of Rohm and Haas and Seller. All such risks will be assumed by the Buyer or User. In no case will Rohm and Haas or Seller be held liable for consequential, special or indirect damages resulting from the use or handling of this product.

GENERAL INFORMATION

KERB 50-W is a selective herbicide formulated as a wettable powder containing 50% active ingredient. It is effective for the control of a wide range of grasses and certain broadleaf weeds. The product is a soil active herbicide with uptake by sensitive weeds occurring through the roots. Before using this herbicide for a specific crop use, study the following general use information which provides important instructions for the safe and effective application of the product.

WEED SPECTRUM

KERB 50-W herbicide is recommended for both preemergence and early postemergence control of winter annual and perennial grasses and chickweed and for preemergence control only of certain other broadleaf weeds and certain other grasses listed below.

WEEDS CONTROLLED BOTH PREEMERGENCE AND EARLY POSTEMERGENCE

BARLEY, FOXTAIL	<i>Hordeum jubatum</i>
BARLEY, VOLUNTEER	<i>Hordeum vulgare</i>
BENTGRASS	<i>Agrostis species</i>
BLUEGRASS, ANNUAL	<i>Poa annua</i>
BLUEGRASS, KENTUCKY	<i>Poa pratensis</i>
BROME, DOWNY (CHEATGRASS)	<i>Bromus tectorum</i>
CHICKWEED, COMMON	<i>Stellaria media</i>
CHICKWEED, MOUSE-EAR	<i>Cerastium vulgatum</i>
FESCUE, TALL	<i>Festuca arundinaceae</i>
OAT, VOLUNTEER	<i>Avena sativa</i>
OAT, WILD	<i>Avena fatua</i>
ORCHARDGRASS	<i>Dactylis glomerata</i>
QUACKGRASS	<i>Agropyron repens</i>
RYE, VOLUNTEER	<i>Secale cereale</i>
RYEGRASS, ITALIAN	<i>Lolium multiflorum</i>
RYEGRASS, PERENNIAL	<i>Lolium perenne</i>
VELVETGRASS	<i>Holcus lanatus</i>
WHEAT, VOLUNTEER	<i>Triticum aestivum</i>

WEEDS CONTROLLED ONLY PREEMERGENCE

BARNYARDGRASS	<i>Echinochloa crus-galli</i>
CANARYGRASS	<i>Phalaris canariensis</i>
CARPETWEED	<i>Mollugo verticillata</i>
CRABGRASS, LARGE	<i>Digitaria sanguinalis</i>
DODDER, FIELD	<i>Cuscuta campestris</i>
FOXTAIL, YELLOW	<i>Setaria lutescens</i>
GOOSEGRASS	<i>Eleusine indica</i>
GOOSEFOOT, NETTLELEAF	<i>Chenopodium murale</i>
HENBIT	<i>Lamium amplexicaule</i>
KNOTWEED, PROSTRATE	<i>Polygonum aviculare</i>
LAMBSQUARTERS, COMMON	<i>Chenopodium album</i>
LOVEGRASS	<i>Eragrostis diffusa</i>
ROCKET, LONDON	<i>Sisymbrium irio</i>
MALLOW, LITTLE (CHEESEWEED)	<i>Malva parviflora</i>
MORNINGGLORY, ANNUAL	<i>Ipomoea purpurea</i>
MUSTARD, WILD	<i>Brassica kaber</i>
NETTLE, BURNING	<i>Urtica urens</i>
NIGHTSHADE, BLACK	<i>Solanum nigrum</i>
NIGHTSHADE, HAIRY	<i>Solanum saracoides</i>

PANICUM, FALL
PURSLANE, COMMON
SHEPHERDSPURSE
SMARTWEED, PALE
SORREL, RED (from seed)
TOMATO, VOLUNTEER
RADISH, WILD

Panicum dichotomiflorum
Portulaca oleracea
Capsella bursa-pastoris
Polygonum lapathifolium
Rumex acetosella
Solane. esculentum
Raphanus sativus

NOTE: The weed species controlled by KERB 50-W herbicide are dependent on the rate used, specific crop culture involved, and the associated conditions of temperature, soil type and moisture availability. Refer to specific crop use directions for weed species controlled.

DOSAGE

The rate of KERB 50-W herbicide required will vary depending on the crop culture involved and weed species to be controlled. See specific crop use directions for all dosage recommendations. All dosage recommendations listed in this label are in terms of pounds KERB 50-W herbicide per broadcast acre. For banded application, the amount of KERB 50-W herbicide used per acre should be reduced according to the following formula:

$$\frac{\text{Band width (in.)}}{\text{Row width (in.)}} \times \text{Rate Per Acre Broadcast} = \text{Amount needed per Acre for Band Application}$$

TIMING AND METHOD OF APPLICATION

Unless specific directions are given under the crop to be treated, KERB 50-W herbicide should be applied in the fall or early winter, when temperatures do not exceed 55°F, BUT PRIOR TO SOIL FREEZE UP. Best weed control results when KERB 50-W herbicide is applied preemergence to the weeds and when application is followed by rainfall or irrigation to move the product into the root zone of the germinating weeds.

KERB 50-W herbicide should be thoroughly mixed in clean water at the recommended concentration and applied uniformly as a spray. For ground application, use a conventional low pressure herbicide sprayer equipped with flat fan nozzles spaced and calibrated to uniformly deliver 20 to 50 gallons of spray per acre. For aerial applications apply in a coarse droplet spray at 5 to 10 gallons per acre. Accurately calibrate spray equipment prior to each use.

EFFECT OF SOIL TYPE, MOISTURE AND TEMPERATURE

KERB 50-W herbicide is most active in coarse to medium textured soils of low organic matter and is relatively inactive in peat or muck soils or mineral soils high in organic matter content at rates recommended in this label. Herbicidal activity is best in soils containing less than 4 percent organic matter. Use in soils with higher organic matter may result in inconsistent or incomplete weed control.

The herbicidal activity of KERB 50-W herbicide is mainly through root absorption in sensitive weed species. Rain, melting snow or irrigation is ESSENTIAL following treatment to move KERB 50-W herbicide into the root zone of germinating weeds.

Under field conditions, KERB 50-W herbicide will remain relatively stable with little loss of herbicidal activity when soil temperatures are less than 55°F. As soil temperatures increase, degradation of the active ingredient takes place. KERB 50-W herbicide may degrade rather quickly if left exposed on the soil surface in warm weather. If KERB 50-W herbicide is applied when air temperatures exceed 85°F, it should be soil incorporated to a shallow depth (top two to three inches) or watered into the soil as soon as possible.

CULTURAL CONSIDERATIONS

For best results apply KERB 50-W to a trash free soil surface. Clean cultivation before application is preferable, but not necessary. To obtain optimum weed control in areas not clean cultivated, the area to be treated should be free of surface litter (dead or decaying crop and weed debris, mowing clippings, etc.). Trash free areas create ideal conditions for rapid movement of KERB into the weed root zone following rain or irrigation.

ROTATION CROP PLANTING INFORMATION

Follow the directions given below when rotation crops will be planted to areas previously treated with KERB 50-W herbicide:

1. Whether KERB 50-W herbicide is bed-topped, banded or broadcast, the beds should be knocked down and the field cross-disced before rotation crops other than artichokes, lettuce, endive or escarole are planted.
2. Where the KERB 50-W herbicide treatment is to be followed by a rotation crop within six months of application, bed-topped or banded applications are suggested.
3. Where small grains or grasses will be planted within one year to areas where KERB 50-W herbicide is to be applied at a dosage rate of 1.0 pound of product per acre or higher, KERB 50-W herbicide should not be broadcast. Treatments should be limited to band or bed-top applications only.
4. Where rotation crops are to follow within one year of the KERB 50-W herbicide treatment, the following rotational plan applies:

<u>Amount of KERB 50-W Applied/Planted Acre²</u>	<u>Waiting Period in Months Before Planting the Crops Indicated¹</u>			
	<u>Group A</u>	<u>Group B</u>	<u>Group C</u>	<u>Group D</u>
1.0 lb.	0	3	3	6
2.0 lb.	0	3	4	9
3.0 lb.	0	4	6	9
4.0 lb.	0	5	7	12

¹Crop Group A - Artichokes, lettuce, endive, escarole

Crop Group B - Beans, corn, cotton, sorghum, carrots, celery

Crop Group C - Broccoli, cabbage, cauliflower, cucurbits, spinach, sugarbeets, onions, tomatoes

Crop Group D - Wheat, barley, oats, grasses

planted Acre refers to Acreage planted. KERB at 4.0 pounds of product per treated acre on two 5 inch treated bands (1/2 inch centers) is the equivalent of one pound KERB 50-W per planted acre. KERB at 4.0 pounds of product as a broadcast treatment (total acreage sprayed) is the equivalent of 4 pounds of KERB 50-W per planted acre.

SPECIFIC CROP USE DIRECTIONS

DIRECTIONS FOR USE
-CALIFORNIA ONLY-
GLOBE ARTICHOKE

GENERAL INFORMATION

KERB 50-W is a selective herbicide for the control of susceptible weeds in either established (ratoon) or transplanted globe artichokes.

WEEDS CONTROLLED

KERB 50-W herbicide is effective at 4.0 to 8.0 pounds of product (2.0 to 4.0 pounds active) per treated acre for the preemergence control of the following weeds:

BARLEY, VOLUNTEER
BLUEGRASS, ANNUAL
CHICKWEED, COMMON
CHICKWEED, MOUSE-EAR
FOXTAIL, YELLOW
GOOSEFOOT, NETTLELEAF
HENBIT
KNOTWEED, PROSTRATE

MALLOW, LITTLE (CHEESEWEED)
MUSTARD, WILD
NETTLE, BURNING
NIGHTSHADE, HAIRY
OAT, VOLUNTEER
OAT, WILD
RYEGRASS, ITALIAN
WHEAT, VOLUNTEER

DOSAGE AND TIMING RECOMMENDATIONS

Established (Ratoon) Artichokes

In coarse to medium soils (sand, sandy loam and silt loam) KERB 50-W herbicide is recommended as a banded treatment over the crop row at the rate of 4.0 pounds of product per broadcast acre. In fine soils (silty clay loam, clay loam and clay soils) apply KERB 50-W herbicide in a banded treatment over the crop row at the rate of 8.0 pounds of product per broadcast acre.

Apply KERB 50-W herbicide at the recommended rate in a single postemergence application to the crop after tillage operations are completed and shoot regrowth of the artichokes has occurred. Application timing should be preemergence to the weeds and before new artichoke leaves are greater than 16 inches long.

Transplanted Artichoke Crowns

For all soil types (except peat and muck) apply KERB 50-W herbicide in banded treatment over the crop row at the rate of 4.0 pounds of product per broadcast acre. Do not use higher rates of KERB 50-W herbicide than 4.0 pounds per acre in one season.

Apply KERB 50-W herbicide in a single application after transplanting the crowns, but before new shoots have developed 3 to 4 new leaves. Application should be preemergence to the weeds.

APPLICATION

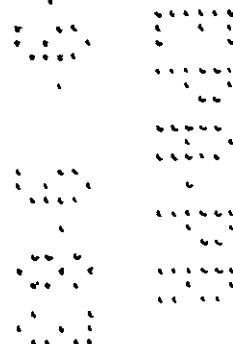
Mix the recommended amount of KERB 50-W herbicide in clean water and apply uniformly with a ground sprayer in 20 to 50 gallons of water per acre. Reduce dosage and volume accordingly for banded treatments. Use a standard low pressure herbicide sprayer equipped with flat fan nozzles that give uniform spray distribution.

SOIL MOISTURE AND IRRIGATION REQUIREMENTS

Moisture is necessary to activate KERB in the soil and move it into the root zone of germinating weeds. In artichoke culture natural rainfall or supplementary overhead irrigation within 1 to 3 days after the application of KERB 50-W herbicide is essential for effective weed control. For best results use overhead sprinkler irrigation equipment to irrigate the field with 1 to 2 inches of water after application of KERB 50-W herbicide.

ROTATION CROPS

Where rotation crops are to follow within one year where KERB 50-W herbicide was applied to artichokes at the rate of 4.0 pounds of product per acre, follow the directions given in the General Information section of this label under ROTATION CROP PLANTING INFORMATION. Where KERB 50-W herbicide was applied at a dosage greater than 4.0 pounds of product per acre, do not plant back crops other than artichokes for a period of 18 months.



ARTICHOKES - SPECIFIC USE RESTRICTIONS

- Do not apply more than 8.0 pounds of KERB 50-W herbicide to established artichokes or more than 4.0 pounds of KERB 50-W herbicide to newly transplanted artichokes per acre broadcast application.
- Do not make more than one application to the artichoke row in one season.
- Do not harvest artichokes within 60 days of the KERB 50-W application.

DIRECTIONS FOR USE
LETTUCE, ENDIVE AND ESCAROLE

GENERAL INFORMATION

KERB 50-W herbicide is a selective herbicide for the control of certain annual grasses and broadleaf weeds in direct seeded or transplanted lettuce, endive and escarole.

WEEDS CONTROLLED

KERB 50-W herbicide is effective at 2.0 to 4.0 pounds of product (1.0 to 2.0 pounds active ingredient) per treated acre for the preemergence control of the following weeds:

GRASSES

BARLEY, FOXTAIL
BARLEY, VOLUNTEER
BARNYARDGRASS
BLUEGRASS, ANNUAL
BROME, DOWNY (CHEATGRASS)
CANARYGRASS
CRABGRASS
FOXTAIL, YELLOW
GOOSEGRASS
LOVEGRASS
OATS, VOLUNTEER
PANICUM, FALL
RYEGRASS, ITALIAN
RYE, VOLUNTEER
WHEAT, VOLUNTEER

BROADLEAF WEEDS

CARPETWEED
CHICKWEED, COMMON
GOOSEFOOT, NETTLELEAF
HENBIT
KNOTWEED
LAMBSQUARTERS, COMMON
MORNINGGLORY, ANNUAL
MUSTARD, WILD
NETTLE, BURNING
NIGHTSHADE, BLACK
NIGHTSHADE, HAIRY
PURSLANE, COMMON
ROCKET, LONDON
SHEPHERDSPURSE
SMARTWEED, PALE
TOMATO, VOLUNTEER

DOSAGE

KERB 50-W herbicide is recommended at the rate of 2.0 to 4.0 pounds of product (1.0 to 2.0 pounds active ingredient) per acre broadcast application. The dosage rate required is dependent on soil texture and method of irrigation. At rates recommended on this label, KERB 50-W is not recommended for weed control on highly organic (peat and muck) soils. For lettuce, endive and escarole follow the dosage recommendations listed in chart below:

WEEDS	POUNDS KERB 50-W PER ACRE BROADCAST APPLICATION ¹		SOIL TEXTURE GROUP 2
	Dependable Rainfall or OVERHEAD IRRIGATION	Less Dependable Rainfall or FURROW IRRIGATION	
Susceptible annual grasses and broadleaf weeds	2.0 - 3.0 (Surface application)	3.0 - 4.0 (Soil incorporation)	Coarse and medium textured soils
	3.0 - 4.0 (Surface application)	4.0 (Soil incorporation)	Fine textured soils

¹ Reduce dosage rate accordingly for banded applications.

² Soil Texture Group

Coarse: sand, loamy sand, sandy loam

Medium: loam, silt loam, silt, sandy clay loam

Fine: silty clay loam, clay loam, sandy clay, silty clay, clay

CROP TOLERANCE

Most varieties of lettuce are highly tolerant of the recommended rates of KERB 50-W herbicide. Do not use more than 3 pounds KERB 50-W on Val Temp, Grande Verde and Prima Verde varieties of crisp lettuce, or on endive and escarole.

TIMING AND METHOD OF APPLICATION

KERB 50-W herbicide can be applied either pre-plant, post-plant or postemergence to lettuce in banded, bed-topped or broadcast applications. Most applications will be made preemergence to the lettuce just before or after planting and preemergence to the weeds. Applications can be made before or after lettuce thinning but should be made prior to weed emergence. Do not apply KERB 50-W herbicide to lettuce within 55 days of harvest and do not make more than one application to each crop of lettuce.

Mix the recommended amount of KERB 50-W herbicide in clean water and apply uniformly with a ground sprayer in 20 to 50 gallons of water per treated acre. Reduce dosage and volume accordingly for banded treatments. Use a standard low pressure sprayer equipped with flat fan nozzles that provide uniform spray distribution.

APPLICATION-MOISTURE REQUIREMENTS

Kerb 50-W herbicide acts mainly through root absorption, therefore it is necessary to move KERB into the root zone of germinating weeds to provide effective control. This can be accomplished by overhead sprinkler irrigation, by rainfall or by shallow mechanical incorporation.

Sprinkler Irrigation

KERB 50-W herbicide can be applied to the soil surface without mechanical incorporation after planting or transplanting if overhead irrigation is used. An initial irrigation of 1 to 2 inches should promptly follow the application of KERB 50-W herbicide, especially in hot weather.

Applications Dependent on Natural Rainfall

In areas of dependable natural rainfall, KERB 50-W herbicide can be applied as a surface treatment preemergence to the weeds. Applications to direct seeded or transplanted lettuce are most successful when followed by 1/2 to 1 inch of rainfall within two to three days after application.

Furrow Irrigation - Mechanical Incorporation

Where rainfall is not dependable or supplementary overhead irrigation is not used, shallow pre-plant incorporation is recommended. PTO driven incorporators or rolling cultivators that thoroughly mix KERB 50-W herbicide into the top 2 inches of soil are suggested.

Incorporation should be simultaneous or immediately after application of KERB 50-W herbicide, especially in hot weather. Irrigation should be started as soon as possible.

Where furrow irrigation is used, spray application and mechanical incorporation should be made after beds have been formed. KERB 50-W herbicide will not be as effective if disced in prior to bed shaping.

Hoeing, thinning or shallow cultivation of soil treated with KERB 50-W herbicide will not destroy its herbicidal activity.

TEMPERATURE

KERB 50-W herbicide is not highly volatile, but it may degrade rather quickly if left exposed on the soil surface in warm weather. If applied when air temperatures exceed 85°F it should be shallow incorporated or watered into the soil as soon as possible, preferably within 1 or 2 days.

ROTATION CROPS

Where rotation crops are to follow within one year of the KERB 50-W treatment to lettuce, endive or escarole, follow the directions given in the General Information section of this label under ROTATION CROP PLANTING INFORMATION.

LETTUCE - SPECIFIC USE RESTRICTIONS

- Do not apply KERB 50-W herbicide to lettuce varieties which will be harvested less than 55 days after treatment.
- Do not apply more than one application of KERB 50-W herbicide to each crop of lettuce.

DIRECTIONS FOR USE

LEGUMES GROWN FOR FORAGE AND SEED - ALFALFA,
CLOVER, BIRDSFOOT TREFOIL, CROWN VETCH AND SAINFOIN

GENERAL INFORMATION

KERB 50-W is a selective herbicide recommended for fall or winter applications to alfalfa, clover, birdsfoot trefoil, crown vetch and sainfoin for both preemergence and postemergence control of susceptible winter annual and perennial grasses and for preemergence control of certain broadleaf weeds.

DOSAGE

KERB 50-W herbicide is recommended at the rate of 1.0 to 4.0 pounds of product (0.5 to 2.0 pounds active ingredient) per broadcast acre application. The required rate will depend on the weed species present as well as the type of irrigation used or the dependability of rainfall following application. The effective rate will be higher in low rainfall areas or where furrow irrigation is used than in areas of dependable rainfall or where overhead irrigation is practiced. Follow the weed control recommendations given in the chart below for fall or winter applications of KERB 50-W herbicide:

WEED CONTROL - DOSAGE AND TIMING RECOMMENDATIONS*

WEEDS CONTROLLED		Pounds KERB 50-W Per Acre Broadcast Application	
		Dependable Rainfall or OVERHEAD IRRIGATION	Low Rainfall or FURROW IRRIGATION
Apply Preemergence or Postemergence To These Weeds:			
Barley, Foxtail	Grain, Volunteer	1.0-1.5	1.5-2.0
Bluegrass, Annual	Oat, Wild		
Brome, Downy (Cheatgrass)	Ryegrass, Italian		
Chickweed			
Bluegrass, Kentucky		1.5-2.0	2.0-3.0
Orchardgrass			
Ryegrass, Perennial			
Quackgrass		2.0-3.0	3.0-4.0
Apply Preemergence Only to These Weeds:			
Sorrel, Red (from Seed)		1.5 - 2.0	2.0 - 3.0
Mustard, Wild	Rocket, London	3.0	4.0
Radish, Wild	Shepherdspurse		

*For control of spring germinating cheatgrass and dodder refer to specific instructions under Spring Use Directions for Established Alfalfa.

TIMING AND METHOD OF APPLICATION

KERB 50-W herbicide should be applied during the fall or winter months. Optimum herbicidal activity occurs when applications are made under cool temperature conditions (55°-60°F) and are followed by rainfall or overhead irrigation. Applications must always be made BEFORE SOIL FREEZE-UP.

Applications are recommended postemergence to established, actively growing or dormant forage legumes or to new plantings after the legume has reached the trifoliolate leaf stage. In established forage legume stands, applications should be made after the last cutting when the weather and soil temperatures are cool. In fall-seeded forage legumes, applications should be made after legumes have reached the trifoliolate leaf stage. In spring-seeded forage legumes, applications of KERB 50-W herbicide should be made the following fall or early winter to control winter annual and perennial grasses. Do not use KERB 50-W herbicide as a preplant or preemergence treatment or before the trifoliolate leaf stage of the legume has developed in new plantings as injury to the legume stand may result. Remove or disperse trash, crop residues and ashes before treatment.

Mix the recommended amount of KERB 50-W herbicide in clean water and apply uniformly with a ground sprayer at 20 to 50 gallons per acre. Use a conventional herbicide sprayer equipped with flat fan nozzles at 40 to 60 psi.

ROTATION CROPS

Where rotation crops are to follow within one year of the KERB 50-W herbicide treatment to alfalfa, clover, birdsfoot trefoil, crown vetch or sainfoin, follow the directions given in the General Information section of this label under ROTATION CROP PLANTING INFORMATION.

SPECIFIC USE RESTRICTIONS - ALFALFA, CLOVER, BIRDSFOOT TREFOIL, CROWN VETCH AND SAINFOIN

- Do not use more than 4.0 pounds of KERB 50-W herbicide per acre per season.
- Do not graze or harvest for forage or dehydration within the following intervals after application:

Alfalfa - below 3.0 pounds KERB 50-W/A
(West of Mississippi River)

- 25 days

Alfalfa - 3.0 to 4.0 pounds KERB 50-W/A
(West of Mississippi River)

+ 45 days

Clover, birdsfoot trefoil, crown vetch, sainfoin
(entire U.S.) and alfalfa (East of Mississippi River)
up to 4.0 pounds KERB 50-W/A

- 120 days

NOTE: The above restrictions do not apply to these crops grown for seed production only.

SPRING USE DIRECTIONS FOR ESTABLISHED ALFALFA -

DODDER CONTROL IN ALFALFA SEED CROPS ONLY IN
CALIFORNIA, IDAHO, NEVADA, OREGON, UTAH AND WASHINGTON

GENERAL INFORMATION

Spring applications of KERB 50-W herbicide are effective for the preemergence control of dodder. Use is restricted to established alfalfa seed crops in California, Idaho, Nevada, Oregon, Utah and Washington.

DOSAGE AND TIMING RECOMMENDATIONS

For effective control, KERB 50-W herbicide must be applied before dodder germinates. Follow directions given below depending on method of irrigation used:

Furrow Irrigation - Apply KERB 50-W at the rate of 3.0 to 4.0 pounds of product (1.5 to 2.0 pounds active ingredient) per acre. Incorporate lightly at time of application and irrigate within seven days.

Flood Irrigation - Apply KERB 50-W at the rate of 3.0 pounds of product (1.5 pounds active ingredient) per acre. Flood field within 1-3 days after application.

Use the standard quantities of irrigation water recommended in your area. Excess irrigation may decrease the effectiveness of KERB 50-W herbicide.

CHEATGRASS CONTROL IN ESTABLISHED ALFALFA (SPRING APPLICATIONS)

DOSAGE AND TIMING RECOMMENDATIONS

Spring application of KERB 50-W herbicide will control cheatgrass if application is made when cheatgrass has recently germinated or expected to germinate. KERB 50-W herbicide should be applied as a broadcast application at the rate of 1.5 to 2.0 pounds of product (0.75 to 1.0 pound active ingredient) per acre.

NOTE: If the legume crop treated with KERB 50-W herbicide should be winter killed or otherwise destroyed, do not plant the field in the spring to small grain or grass crops since these crops may be injured from residual KERB in the soil. For additional information see Rotation Crop Planting Chart in the General Information section of this label.

DIRECTIONS FOR USE
ORNAMENTAL BERMUDAGRASS - GROWN FOR TURF OR SEED

GENERAL INFORMATION

KERB 50-W is a selective herbicide recommended for the preemergence and postemergence control of annual bluegrass (*Poa annua*) in ornamental bermudagrass (*Cynodon dactylon*) turf or bermudagrass grown for seed.

WEED CONTROL

KERB 50-W herbicide will control annual bluegrass from pregermination and seedling stages through tillering, heading and seed formation. KERB 50-W herbicide acts slowly on seedling to mature annual bluegrass. Following application of KERB 50-W annual bluegrass may first become dark green and then gradually turn yellow and die over a 3 to 5 week period.

For effective control of annual bluegrass in bermudagrass turf or seed crops moisture is necessary to move KERB 50-W herbicide in the weed root zone. Refer to the Moisture Requirement section of this label for details.

DOSAGE AND TIMING OF APPLICATION

KERB 50-W herbicide is recommended at the rate of 1.0 to 3.0 pounds of product (0.5 to 1.5 pounds active ingredient) per acre broadcast application. The dosage rate required is dependent on the growth stage of annual bluegrass at time of application. Follow the dosage rate and timing recommendations given below:

<u>Annual Bluegrass Growth Stage</u>	<u>Pounds KERB 50-W Per Acre Broadcast Application</u>
Preemergence or early postemergence	1.0-2.0*
Postemergence-early tillering to heading	1.5-2.0
Postemergence-seed forming stages	2.0-3.0

*Use the higher rate when longer preemergence residual control is desired.

APPLICATION

Mix the recommended amount of KERB 50-W herbicide in clean water and apply uniformly with a low pressure ground sprayer in 20 to 50 gallons of water per acre. The sprayer should be equipped with flat fan nozzles, spaced to provide uniform distribution without skips or excessive overlapping of spray patterns.

NOTE - Avoid spraying on fairways or approaches that may drain onto bentgrass greens or to areas overseeded with sensitive cool season grasses.

MOISTURE REQUIREMENTS

KERB 50-W herbicide acts mainly through root absorption in sensitive weed species. If no rainfall occurs within a day or so of the application, a light overhead irrigation should be made to move the chemical into the weed root zone. Avoid heavy irrigations of more than 1 inch to reduce the possibility of excess washing or leaching of the chemical from the area of application.

ORNAMENTAL BERMUDAGRASS TURF OR SEED CROP - SPECIFIC USE RESTRICTIONS

- Do not apply KERB 50-W herbicide to areas that are to be overseeded with susceptible cool season grasses within 90 days of treatment.
- Do not apply KERB 50-W to dicondra, perennial bluegrass, annual and perennial ryegrasses, fescues and bentgrasses.
- KERB 50-W herbicide is not recommended for use on golf greens.
- Do not graze treated areas and do not feed clippings to livestock.

DIRECTIONS FOR USE

WOOD ORNAMENTALS, NURSERY STOCK AND CHRISTMAS TREES

GENERAL INFORMATION

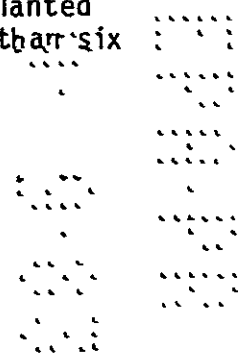
KERB 50-W is a selective herbicide recommended for fall applications to established woody ornamentals, nursery stock and Christmas trees for the control of winter annual and perennial grasses and certain broadleaf weeds.

CROP TOLERANCE

At recommended rates of KERB 50-W herbicide the following trees and shrubs are tolerant to topical applications made in the fall:

Azalea	Forsythia	Pine
Douglas Fir	Holly	Rhododendron
Fir	Juniper	Yew

KERB 50-W herbicide should only be used on established trees and woody ornamentals. KERB 50-W herbicide is not recommended for use on seedling trees or shrubs less than one year old or to fall transplanted stock transplanted less than one year or to spring transplanted stock transplanted less than six months.



WEED CONTROL

KERB 50-W herbicide is effective in fall applications at the rate of 2.0 to 4.0 pounds of product (1.0 to 2.0 pounds active ingredient) per treated acre for the preemergence and postemergence control of susceptible winter annual and perennial grasses and chickweed and for preemergence control only of other broadleaf weeds listed on this label. Refer to chart in dosage rate section below for specific weeds controlled.

DOSAGE AND APPLICATION TIMING

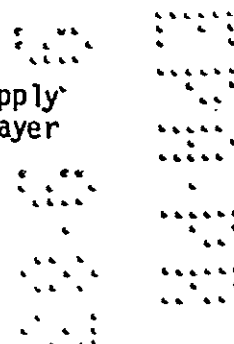
KERB 50-W herbicide is recommended in a single, fall application, either directed or topically applied, to woody ornamentals, nursery stock or christmas trees at the rate of 2.0 to 4.0 pounds of product (1.0 to 2.0 pounds active ingredient) per treated acre. Application of KERB 50-W herbicide should be made in the fall prior to leaf drop and soil freeze-up. For control of winter annual or perennial grasses or chickweed, applications can be made either preemergence or postemergence to the weeds. For control of other labeled broadleaf weeds, preemergence applications must be used to achieve control.

The dosage rate required will depend on the weed species present in the area to be treated. Follow the weed control recommendations given in the chart below:

<u>Weeds Controlled</u>		<u>Pounds KERB 50-W Per Acre</u> <u>Broadcast Application</u>
Barley, Foxtail Bluegrass, Annual Brome, Downy (Cheatgrass) Chickweed	Grain, Volunteer Ryegrass, Italian Sorrel, Red (from seed)	2.0
Mustard, Wild Rocket, London	Shepardspurse	3.0
Bluegrass, Kentucky Orchardgrass Quackgrass	Ryegrass, Perennial	4.0

APPLICATION

Mix the recommended amount of KERB 50-W herbicide in clean water and apply uniformly in 20 to 50 gallons per acre. Use a low pressure ground sprayer equipped with flat fan nozzles spaced to provide uniform distribution.



Dosage recommendations listed on this label are for surface broadcast application. For banded treatments down the row, the amount of KERB 50-W used per acre should be reduced according to the following formula:

$$\frac{\text{Band width (inches)}}{\text{Row width (inches)}} \times \text{Rate per Acre Broadcast} = \text{Amount Needed per Acre for Band Application}$$

KERB 50-W should not be soil incorporated.

SOIL AND MOISTURE REQUIREMENTS

KERB 50-W herbicide is most active in coarse to medium textured soils of low organic matter and is relatively inactive in peat or muck soils or mineral soils high in organic matter content at rates recommended in this label. Herbicidal activity is best in soils containing less than 4 percent organic matter. Use in soils of higher organic matter content may result in inconsistent or incomplete weed control.

KERB-50W herbicide acts mainly through root absorption in sensitive weed species. Dependable rainfall or overhead irrigation is essential following application for effective weed control.

Woody Ornamentals, Nursery Stock and Christmas Trees Specific Use Restrictions

- o Apply KERB 50-W herbicide in the fall prior to soil freeze-up.
- o Do not soil incorporate KERB 50-W.

DIRECTIONS FOR USE

TREEFRUIT (APPLE, CHERRY, NECTARINE, PEACH, PEAR, PLUM, PRUNE)
AND GRAPE PLANTINGS

GENERAL INFORMATION

KERB 50-W is a selective herbicide for use in directed spray applications for the control of winter annual and perennial grasses and certain broadleaf weeds in non-bearing and bearing apples, cherries, nectarines, peaches, pears, plums, prunes and grape plantings.

WEED CONTROL

KERB 50-W herbicide is effective at 2.0 to 8.0 pounds of product (1.0 to 4.0 pounds active ingredient) per treated acre for the preemergence and postemergence control of susceptible winter annual and perennial grasses and chickweed and for preemergence control only of other broadleaf weeds listed on this label. Refer to chart in dosage rate section below for specific weeds controlled.

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DOSAGE AND TIMING RECOMMENDATIONS

KERB 50-W herbicide is recommended in a single, directed application to labeled fruit trees and grape plantings at dosage rates of 2.0 to 8.0 pounds of product (1.0 to 4.0 pounds active ingredient) per treated acre. Application of KERB 50-W should be in the fall, after the fruit is harvested, but prior to leaf drop and soil freeze-up.

The dosage rate required for effective weed control will depend on the weed species present and the soil texture of the area being treated. Follow the specific rate recommendations given in the chart below for the use of KERB 50-W herbicide in labeled fruit trees and grapes:

DOSAGE RECOMMENDATIONS:

POUNDS OF KERB 50-W PER ACRE

<u>Weeds Controlled</u>		<u>Dependable Rainfall or Overhead Irrigation</u>		
		<u>Soil Texture Group*</u>		
		<u>Coarse</u>	<u>Medium</u>	<u>Fine</u>
Bluegrass, Annual	Oat, Wild	2.0	3.0	4.0
Brome, Downy (Cheatgrass)	Ryegrass, Italian			
Chickweed	Sorrel, Red (from seed)			
Grain, Volunteer				
<hr/>		<hr/>		
Bluegrass, Kentucky	Quackgrass	3.0-4.0	4.0-6.0	6.0-8.0
Fescue, Tall	Ryegrass, Perennial			
Orchardgrass				

*Soil Texture Group

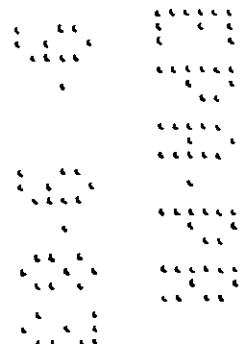
Coarse: sand, loamy sand, sandy loam

Medium: loam, silt loam, silt, sandy clay loam

Fine: silty clay loam, clay loam, sandy clay, silty clay, clay

APPLICATION:

Mix the recommended amount of KERB 50-W in clean water and apply uniformly in 40 to 50 gallons of water per acre. Use of a low pressure ground sprayer equipped with a breakaway boom and flat fan or off-center (OC) nozzles is recommended. KERB 50-W should be directed to the soil and the base of trees and vines.



NOTES: Dosage recommendations listed on this label are for surface broadcast application. For banded treatments, the amount of KERB 50-W used per acre should be reduced according to the following formula:

$$\frac{\text{Band width (in.)}}{\text{Row width (in.)}} \times \text{Rate Per Acre Broadcast} = \text{Amount Needed per Acre for Band Application}$$

KERB 50-W herbicide should not be soil incorporated.

CROP TOLERANCE

When used as recommended, established non-bearing or bearing fruit trees and grapes listed on this label are very tolerant to KERB 50-W herbicide. KERB 50-W herbicide should not be applied to seedling trees or vines less than 1 year old or to fall transplanted stock transplanted less than 1 year or to spring transplanted stock transplanted less than 6 months.

CULTURAL CONSIDERATIONS

KERB 50-W herbicide acts mainly through root absorption in sensitive weed species. Dependable rainfall or overhead irrigation is essential following the application for effective weed control. Trash-free areas create ideal conditions for rapid movement of KERB 50-W herbicide into the weed root zone following rain or irrigation. Clean cultivation before application is preferable but not necessary.

To obtain optimum weed control in areas not clean cultivated, the area to be treated should be free of surface litter (dead or decaying weeds, leaves, mowing clippings, etc). If area to be treated is under a mixed grass or weed sod, it should be mowed and the clippings removed.

TREEFRUIT (APPLE, CHERRY, NECTARINE, PEACH, PEAR, PLUM, PRUNE) AND GRAPE PLANTINGS SPECIFIC USE RESTRICTIONS

- Do not feed or allow livestock to graze areas treated with KERB 50-W herbicide.
- Do not apply KERB 50-W herbicide to labeled fruit trees or grapes at rates higher than 8.0 pounds product (4.0 pounds active ingredient) per acre and make only one application per season.

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DIRECTIONS FOR USE
OREGON AND WASHINGTON ONLY -
BLUEBERRIES

GENERAL INFORMATION

KERB 50-W is a selective herbicide recommended for fall and winter applications to established blueberries for both preemergence and postemergence control of winter annual and perennial grasses and chickweed and preemergence control of certain broadleaf weeds.

DOSAGE RECOMMENDATIONS

KERB 50-W herbicide is recommended at the rate of 2.0 to 4.0 pounds of product (1.0 to 2.0 pounds active ingredient) per acre broadcast application. The rate will depend on the weed species present. Follow the weed control recommendations listed in the chart below:

Weeds Controlled		Pounds Kerb 50-W per Acre ¹ Dependable Rainfall or Overhead Irrigation ²
Bluegrass, Annual Brome, Downy (Cheatgrass) Chickweed	Oat, Wild Sorrel, Red (from seed)	2.0
Bentgrass Bluegrass, Kentucky Fescue, Tall Orchardgrass	Quackgrass Ryegrass, Perennial Velvetgrass	4.0

¹Dosage rates recommended are in pounds of KERB 50-W per acre broadcast application. Reduce rates accordingly for banded applications.

²For effective weed control, rainfall or overhead irrigation is essential following the application of KERB 50-W.

CROP TOLERANCE

Established blueberry plants are tolerant to recommended rates of KERB 50-W herbicide. Do not apply KERB 50-W to newly transplanted blueberries until roots are well established.

TIMING AND METHOD OF APPLICATION

Apply KERB 50-W herbicide only during the fall or winter months. For optimum results, apply KERB 50-W during November or December. Do not make applications when ground is frozen.

Mix the recommended amount of KERB 50-W in clean water and apply uniformly with a low pressure ground sprayer in 20 to 50 gallons of water per acre.

BLUEBERRIES - SPECIFIC USE RESTRICTIONS

- Do not make more than one application of KERB 50-W herbicide per year and do not apply KERB 50-W at rates higher than 4.0 pounds product (2.0 pounds active ingredient) per acre.

DIRECTIONS FOR USE OREGON AND WASHINGTON ONLY BLACKBERRIES AND RASPBERRIES

GENERAL INFORMATION

KERB 50-W herbicide is a selective herbicide recommended for fall and winter applications to established blackberries and raspberries for both preemergence and postemergence control of certain winter annual and perennial grasses.

DOSAGE

KERB 50-W herbicide is recommended at the rate of 2.0 to 6.0 pounds of product (1.0 to 3.0 pounds active ingredient) per acre broadcast application. The rate will depend on the weed species present and the soil texture of the site being treated. Follow the weed control recommendations listed in the chart below:

POUNDS OF KERB 50-W PER ACRE¹

<u>Weeds Controlled</u>	<u>Dependable Rainfall or Overhead Irrigation²</u>	<u>Comments</u>
Bluegrass, Annual	2.0 - 4.0	Use low rates
Ryegrass, Perennial	4.0 - 6.0	on light to medium
Quackgrass	4.0 - 6.0	soils and high rates on heavy soils

¹Dosage rates recommended are in pounds of KERB 50-W per acre broadcast application. Reduce rate, accordingly for banded applications.

²For effective weed control, rainfall or overhead irrigation is essential following the application of KERB 50-W.

CROP TOLERANCE

Established cane fruit are tolerant to recommended rates of KERB 50-W herbicide. Newly transplanted blackberries or raspberries should be well rooted and transplanted for at least 3 months prior to the application of KERB 50-W herbicide.

TIMING AND METHOD OF APPLICATION

Apply KERB 50-W herbicide only during the fall or winter months. For optimum results, apply KERB 50-W during November or December. Do not make applications when the ground is frozen. Mix the recommended amount of KERB 50-W in clean water and apply uniformly with a low pressure ground sprayer in 20 to 50 gallons of water per acre.

BLACKBERRIES AND RASPBERRIES - SPECIFIC USE RESTRICTIONS

- Do not make more than one application of KERB 50-W per year and do not apply KERB 50-W at rates higher than 6.0 pounds product (3.0 pounds active ingredient) per acre.