

PM 25  
2217-675  
111

ACME (R) AGRICULTURAL PRODUCTS

NOROSAC (R)

4G

DICHLORBENIL HERBICIDE

**ACCEPTED**  
SEP 28 1988  
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 2217-675

a selective herbicide for control of CRABGRASS, FOXTAIL, SHEPHERDSPURSE, HORSETAIL, PIGWEED, QUACKGRASS, CANADA THISTLE, LEAFY SPURGE, FESCUE, and CERTAIN OTHER ANNUAL AND PERENNIAL WEEDS.

ACTIVE INGREDIENT:

*Dichlobenil.....	4.0%
INERT INGREDIENTS.....	96.0%
	TOTAL 100.0%

\*2,6-DICHLOROBENZONITRILE

✓  
✓  
KEEP OUT OF REACH OF CHILDREN  
CAUTION  
SEE BACK OF BAG FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

✓  
NET WEIGHT FIFTY POUNDS  
(22.68 KILOGRAMS)

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STOP! READ THE ENTIRE LABEL FIRST.  
OBSERVE ALL PRECAUTIONS AND  
FOLLOW DIRECTIONS CAREFULLY.

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| PRECAUTIONARY STATEMENTS

| Hazards to Humans & Domestic Animals

| CAUTION: Harmful if swallowed. Do not breathe dust. Do  
| allow contact with eyes or skin.

| Statement of Practical Treatment

| IF SWALLOWED: Induce vomiting by drinking water and  
| touching back of throat with finger. Do not induce vomiting  
| or give anything by mouth to an unconscious person.

| IF INHALED: Remove victim to fresh air.

| IF IN EYES: Flush with plenty of water. Get medical  
| attention if irritation persists.

| IF ON SKIN: Wash with plenty soap and water.

| Environmental Hazards

| Do not contaminate water by cleaning of equipment or  
| disposal of wastes.

| [(WHEN CRANBERRY USE IS NOT INCLUDED ON SUBLABEL) Cover,  
| collect, or incorporate granules spilled on the soil  
| surface. Do not apply directly to water or wetlands  
| (swamps, bogs, marshes and potholes). Do not contaminate  
| water by cleaning of equipment or disposal of wastes.]

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| DIRECTIONS FOR USE

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

(FOR BAGS)

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| STORAGE & DISPOSAL

| STORAGE: Store in original bag in a locked storage  
| area inaccessible to children or pets. Storage area  
| should be cool and dry. Keep bag tightly closed,  
| Reseal bag by rolling down top to product level and  
| taping or clipping. Do not store near seeds, bulbs, or  
| in greenhouses.

| PESTICIDE DISPOSAL: Do not contaminate water, food, or  
| feed by storage or disposal. Wastes resulting from the  
| use of this product may be disposed of at an approved  
| waste disposal facility.

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

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[For SPRED-RITE<sup>(R)</sup> spreader]

STORAGE & DISPOSAL

STORAGE: Store in original container in a locked storage area inaccessible to children or pets. Storage area should be cool and dry. Keep container tightly closed using disc seal inside cap. Do not store near seeds, bulbs, or in greenhouse. Do not contaminate water, food or feed by storage or disposal.

PRODUCT DISPOSAL: Securely wrap original container in several layers of newspaper and discard in trash.

CONTAINER DISPOSAL: Refill the SPRED-RITE<sup>(R)</sup> applicator with BARRIER<sup>(R)</sup> 2G granules available in 5 lb. bags. Do not use this applicator for any other purpose. When applicator becomes inoperable, or is no longer wanted, rinse thoroughly and place in trash collection.

IMPORTANT! Always wash hands, face, and arms with soap and water before smoking, eating, drinking, or toileting.

Keep all unprotected persons, children, livestock, and pets away from treated area or where there is a danger or drift.

Do not rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help right away. See Statement of Practical Treatment.

[(STATEMENT PLACED ON LABEL) "Refer to product labeling for use restrictions to protect ENDANGERED SPECIES."]

"ENDANGERED SPECIES RESTRICTIONS"

Before using this product in forest in a county listed below, you must contact the Endangered Species Specialist in the Regional/Field Office of the U.S. Fish and Wildlife Service (FWS) indicated below. You must provide FWS with your name and phone number, the product you intend to use, and the specific location in which you intend to use it. The U.S. Fish and Wildlife Service will inform you whether your proposed use is in the range of endangered species. Use of this product in the range of endangered species, as defined for you by FWS is prohibited.

Contact FWS Field Offices at the following numbers:

ALABAMA (Jackson, Mississippi, 601-965-4900)  
Cherokee, De Kalb, Etowah, Jackson, Marshall and St. Clair

ARKANSAS (JACKSON, MISSISSIPPI, 601-965-4900)  
Clay, Jackson, Lawrence and Woodruff

CALIFORNIA ( Sacramento, California, 916-978-4613)  
Lake

CONNECTICUT (Concord, New Hampshire, 603-225-1411)  
Litchfield

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DELAWARE (Annapolis, Maryland, 301-269-5448)  
New Castle

FLORIDA (Jacksonville, Florida, 904-791-2580)  
Clay, Gadsden, Gulf, Jackson, Liberty, Marion, Orange and  
Polk

GEORGIA (Jacksonville, Florida, 904-791-2580)  
Baker, Brantley, Burke, Decatur, Dooly, Floyd, Gordon,  
Habersham, Lee, Rabun, Stephens, Sumter, Towns, Walker,  
Wayne and Wheeler

ILLINOIS (Bloomington, Indiana, 309-793-5800)  
Randolph

IOWA (St. Paul, Minnesota, 612-725-7131)  
Allamakee, Clayton, Delaware, Dubuque, Fayette and Jackson

MAINE (Concord, New Hampshire, 603-225-1411)  
Aroostook, Cumberland, Kennebec and York

MARYLAND (Annapolis, Maryland, 301-269-5448)  
Queen Anns

MASSACHUSETTS (Concord, New Hampshire, 603-225-1411)  
Essex and Hampshire

MICHIGAN (E. Lansing, Michigan, 517-337-6650)  
Berrien

MINNESOTA (Twin Cities, Minnesota, 612-725-3276)  
Goodhue and Rice

MISSISSIPPI (Jackson, Mississippi, 601-965-4900)  
Sharkey and Sunflower

MISSOURI (Columbia, Missouri, 314-875-5374)  
Christian, Dade, Greene and Ripley

NEW HAMPSHIRE (Concord, New Hampshire, 603-225-1411)  
Belknap, Carroll, Merrimack, Rockingham and Strafford

NEW JERSEY (State College, Pennsylvania, 814-234-4090)  
Sussex

NEW YORK (Cortland, New York, 607-753-9334)  
Delaware, Sullivan and Ulster

NORTH CAROLINA (Asheville, North Carolina, 704-259-0321)  
Avery, Bladen, Burke, Haywood, Henderson, Macon, Mitchell  
and Scotland

OHIO (Columbus, Ohio, 614-231-3416)  
Portage and Summit

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PENNSYLVANIA (State College, Pennsylvania, 814-234-4090)  
Centre and Venango

RHODE ISLAND (Concord, New Hampshire, 603-225-1411)  
Providence

SOUTH CAROLINA (Asheville, North Carolina, 704-259-0321)  
Bamberg, Barnwell, Berkeley, Clarendon, Colleton, Lee,  
Oconee, Orangeburg, Poinciana and Richland

TENNESSEE (Asheville, North Carolina, 704-259-0321)  
Carter, Hamilton and Walker

UTAH (Salt Lake City, Utah, 801-524-4430)  
Cache, Emery, Sevier and Wayne

VIRGINIA (Annapolis, Maryland, 301-269-5448)  
Caroline, James City, Prince William and Smyth

WISCONSIN (Green Bay, Wisconsin, 414-465-2682)  
Grant, Monroe, Richland, Sauk and Vernon

#### PERENNIAL WEED CONTROL

This product is recommended for control of certain perennial weeds such as ARTEMISIA, CANADA THISTLE, CURLY DOCK, FALSE-DANDELION (CATSEAR), FESCUE, HORSETAIL, LEAFY SPURGE, ORCHARDGRASS, QUACKGRASS, RUSSIAN Knapweed, TIMOTHY, WILD ARTICHOKE, WILD ASTER, WILD CARROT, AND YELLOW ROCKET IN ESTABLISHED WOODY ORNAMENTALS AND FRUIT and for control in non-crop areas such as along roads & highways, in Forestry Parklands, Parks, around buildings, hedges and trees, play & sports grounds, along fences, railroad and utility right-of-ways and installations.

**SOIL SURFACE TREATMENT:** Apply as soil surface treatment from late fall through early spring. For best results, applications in the states of Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, Michigan, Wisconsin, Minnesota, North Dakota, South Dakota and Montana should be made in early spring after the ground has thawed. Do not apply to frozen ground or over the top of the snow. Old weed growth should not be removed before application. Do not make surface application to areas which have been cultivated during the fall or summer prior to application.

**INCORPORATED TREATMENT:** Apply and incorporate immediately after application in late fall or very early spring.

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ANNUAL WEED CONTROL

This product is recommended for control of annual grassy and broadleaved weeds such as: ANNUAL BLUEGRASS (POA ANNUA) ✓  
 BLUEGRASS ✓ BULL THISTLE ✓ CAMPHORWEED ✓ CARPETWEED ✓  
 CHICKWEED ✓ CITRON MELON ✓ COFFEWEED ✓ CRABGRASS ✓ CUDWEED ✓  
 DANDELION ✓ DOGFENNEL ✓ EVENINGPRIMROSE ✓ FIDDLENECK ✓ FLORIDA  
 PURSLANE (PUSLEY) ✓ FOXTAIL ✓ GISEKIA ✓ GROUNDSEL ✓ HENBIT ✓  
 JERUSALEMOAK ✓ GOOSEFOOT ✓ KNOTWEED ✓ LAMBSQUARTERS ✓ MAYPOPS ✓  
 MILKWEED VINE (MORRENIA ODORATA) ✓ MINERS LETTUCE ✓ NATALGRASS ✓ OLD  
 WITCHGRASS ✓ PEPPERGRASS ✓ PINEAPPLEWEED ✓ PLANTAIN ✓ PURSLANE ✓  
 RAGWEED ✓ RED DEADNETTLE ✓ REDROOT PIGWEED ✓ ROSARYPEA ✓ RUSSIAN  
 THISTLE ✓ SHEPHERDSPURSE ✓ SMARTWEED ✓ SPANISH NEEDLES ✓ SPURGE ✓  
 TEAWEED ✓ TEXAS PANICUM (HURRAHGRASS) ✓ WILD BARLEY ✓ WILD MUSTARD ✓  
 WILD RADISH ✓ AND YELLOW WOODSORREL ✓

Apply in early spring before seeds of annual weeds germinate or after cultivation has removed the growing weeds. Distribute granules uniformly over the soil surface. If treatment is followed by application of 1/2 to 1 inch of water by overhead irrigation, the lower rates are recommended. Shallow incorporation immediately after application is recommended in southern areas. In other areas, shallow incorporation or sprinkler irrigation is suggested when applications are made during periods of high temperatures.

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FRUIT IN ORCHARDS AND NURSERIES

This product may be used on the following crops. do not allow livestock to graze treated orchards:

- A. Apple, Blueberry, Cherry, Grape, Nectarine, Peach, Pear, Prune Plum: May be used on bearing, non-bearing and nursery stock. Do not apply until 4 weeks after transplanting. Do not make application within one month of harvest on stone fruits. Apply 100 to 150 pounds per acre for annual weed control based on area actually treated. For control of perennial weeds apply 150 pounds per acre. Follow General Directions for Use.
- B. Blackberry and Raspberry: For control of annual weeds follow General Directions for Use, except use only on established plantings and do not apply more than 100 pounds per acre. Do not apply during new shoot emergence.

WOODY ORNAMENTALS (ESTABLISHED and NURSERY STOCK) FOREST PLANTINGS, and SHELTER BELTS:

For control of annual weeds this product may be used on the following plants. Apply 100 to 150 pounds per acre, based on area actually treated. Do not apply until 4 weeks after transplanting. Follow Directions for Use above.

For control of perennial weeds listed, apply 150 to 200 pounds per acre. Do not apply more than 150 pounds per acre on AZALEA, BOXWOOD, EUONYMUS, FORSYTHIA, HEATHER, HOLLY, IVY, LILAC, LEUCOTHOE. Do not apply more than 150 pounds per acre on plantings less than one year old. Follow Directions for Use listed above. Do not apply to containers in which nursery stock is grown.

- |                       |                                  |                 |
|-----------------------|----------------------------------|-----------------|
| ✓ Amur Corktree       | ✓ Filbert                        | ✓ Nandina       |
| ✓ Arbor Vitae         | ✓ Flowering Almond               | ✓ Oak           |
| ✓ Ash                 | ✓ Flowering Quince               | ✓ Osmanthus     |
| ✓ Azalea <sup>1</sup> | ✓ Forsythia                      | (Holy-olive)    |
| ✓ Barberry            | ✓ Gardenia                       | ✓ Pachistima    |
| ✓ Beauty Bush         | ✓ Goldenraintree                 | ✓ Pecan         |
| ✓ Birch               | ✓ Hackberry                      | ✓ Photinia      |
| ✓ Boxelder            | ✓ Heather                        | ✓ Pine          |
| ✓ Boxwood             | ✓ Holly (Ilex spp.) <sup>2</sup> | ✓ Pittosporum   |
| ✓ Camellia            | ✓ Honeysuckle                    | ✓ Poplar        |
| ✓ Caragana            | ✓ Ivy (Hederahelix)              | ✓ Privet        |
| ✓ Cleyera japonica    | ✓ Juniper                        | ✓ Pyracantha    |
| ✓ Cotoneaster         | ✓ Kinnikinnick                   | ✓ Rhododendron  |
| ✓ Cottonwood          | ✓ Laurel                         | ✓ Rockrose      |
| ✓ Crabapple           | ✓ Leucothoe                      | ✓ Rose          |
| ✓ Deutzia             | ✓ Lilac                          | ✓ Russian Olive |
| ✓ Dogwood             | ✓ Linden                         | ✓ Spirea        |
| ✓ Eastern Red Cedar   | ✓ Locust                         | ✓ Squaw carpet  |
| ✓ Elm                 | ✓ Magnolia                       | ✓ Willow        |
| ✓ Elwood Cypress      | ✓ Maple                          | ✓ Weigela       |
| ✓ English Walnut      | ✓ Mock Orange                    | ✓ Yew (Taxus)   |
| ✓ Euonymus            | ✓ Mountain Ash                   |                 |

1 Kurume, Mollis, Hardy hybrid types and hardy native species only.  
 2 Except I. crenata, I. rotunda, I. vomitoria

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**USE PRECAUTIONS:**

Do not use in seed beds, transplant or cutting beds or greenhouses. Do not apply until 6 months after rooting of cuttings in the field, or after planting rooted cuttings. Do not apply to areas on slopes above lawns or susceptible crops as run-off water from treated area could cause injury. Do not apply on fruit stock within 3 months prior to or following grafting or budding of root stocks or planting of new grafts. Do not apply more than the maximum recommended amount per growing season. Do not use on "St. Lucie fine sand," "Arzell fine sand" or other light sand soil. Do not graze livestock in treated areas. Store in a tightly closed container in a dry place.

**WEED CONTROL IN CRANBERRIES**

Control of perennial and annual, broadleaved and grassy weeds (including rushes and sedges) in cranberries can be obtained by use of this product. The following weeds are controlled: Sensitive Fern, Bracken Fern, Royal Fern, Hair Cap Moss, Common Horsetail, Water Horsetail (pipes), Rush (Juncus spp.), Dodder, Bluejoint grass, Rattlesnake grass, (Manna grass), Summer grass, Velvetgrass, Bent grasses, Little Hairgrass, Crabgrass, Rice Cutgrass, Bunch grass, Muskrat grass, Nutsedge (nutgrass), Short Wiregrass, Wideleaf grass, Stargrass, Woolgrass, Cotton grass, Needle grass, Oniongrass, Arrowleaved Tear Thumb, Beggar's ticks, Knotweed, Loosestrife, Marsh St. Johnswort, Tideland clover, Ragweed, Sorrel, Wild Strawberry, Aster, Buckbean, Hawkweed, Western Lilaeopsis, Marsh Pea, Plantain, Smartweed (Marshpepper, Pennsylvania, Spotted, Swamp and Water).

Application should be made in early spring while perennial weeds are still dormant and annual weeds have not started to germinate or in late fall after crop has been harvested. Apply pre-bloom or post-harvest.

**SPRING TREATMENT**

**AREAS OTHER THAN PACIFIC NORTHWEST** -- Apply 100 pounds per acre. Do not make spring application if treatment was made the previous fall. See specific directions for spring treatment in the Pacific Northwest.

**PACIFIC NORTHWEST** -- Two equal applications may be made in early spring with an interval of 3 to 6 weeks between treatments. Total application should be 100 pounds per acre.

**FALL TREATMENT**

In all growing areas apply 100 to 150 pounds per acre in the fall after crop has been harvested. Do not make fall application if treatment was made the previous spring. Use high rate only on very weedy bogs, or on bogs abandoned because of weeds.

**USE PRECAUTIONS:**

Distribute granules uniformly. Avoid over-application which may result from overlapping during treatment. Temporary reddening of cranberry plants may occur especially with late spring application or when applied on sandy bogs. Do not use on young

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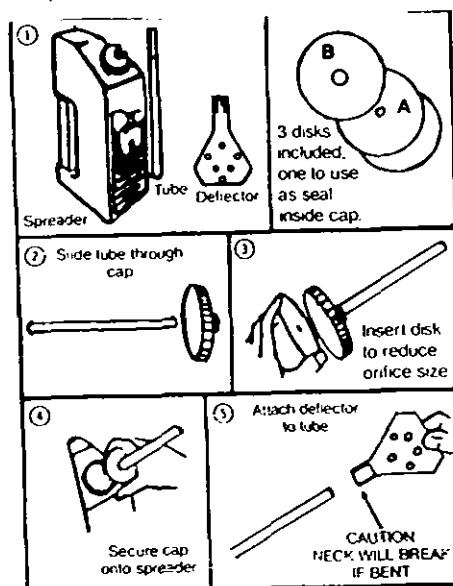
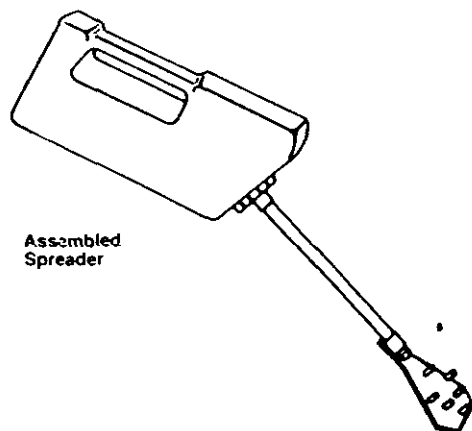
beds or newly sanded beds or on boas prior to or immediately after mowing for vines.

#### OTHER USES

#### HOW TO ASSEMBLE THE SPRED-RITE (R) GRAVITY-FLOW APPLICATOR:

##### Instructions for assembly of spreader:

1. Illustration of Spreader, Tube Deflector
2. Illustration of Slide Tube Through Cap
3. Place Disk in Cap
4. Secure Cap onto Spreader
5. Attach Deflector to Tube



##### Directions For Use

1. To start the flow of granules: Tilt the spreader down until granules flow through the tube and across the deflector.
2. To stop the granule flow: Tilt the spreader back toward the upright position.
3. To adjust the volume of granule flow: Use of the "A" or "B" disk in the cap adjusts the volume of granules that will flow through the tube. The smaller the orifice used the smaller the flow will be. To obtain maximum flow of granules, do not use either orifice disk.

CAUTION: Use without either orifice disk will result in an extremely rapid flow of granules that may cause over application and risk of damage to desirable plantings or result in a waste of the product.

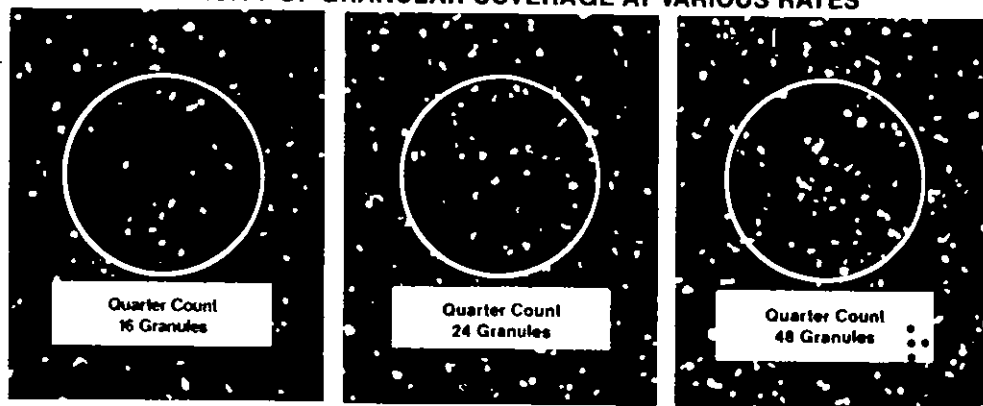
- To adjust the width of the band of granules: Hold the deflector close to the ground to produce a narrow band. As the deflector is raised, the band applied will widen. The spreader will apply a band of granules 30 to 36 inches wide when the deflector is held about 3 feet above the ground. By turning the deflector sideways, a 2 to 4 inch band will result.

Granules may be applied to cracks and other very narrow areas by removing the deflector head entirely. NOTE: When the spreader is used in this manner, the "A" disk should be used too slow down the flow of the granules.

- Side delivery of granules: The operator can direct the granules out to the side and under hedges, bleachers, guard rails, etc. while walking straight ahead. Hold spreader parallel to the body, but with deflector positioned sideways.
- The amount of granules applied will depend on the orifice disk used and the speed the person walks while making the application.

Refer to the rate diagrams for the pattern of granules for the various recommended rates. These patterns should be duplicated as nearly as possible for best results.

DENSITY OF GRANULAR COVERAGE AT VARIOUS RATES



2.25 lb / 1000 sq. ft  
(100 lbs per acre)

3.37 lb./1000 sq. ft  
(150 lbs per acre)

6.75 lb./1000 sq. ft  
(300 lbs per acre)

\*For "Quarter Count" press a 25¢ piece into treated soil. Remove and count number of granules. Repeat 3 or 4 times.

**NUTSEDGE CONTROL:** To control nutsedge (nutgrass) on mineral soils in areas on which containers of nursery stock are to be grown or held -- and also for control in non-crop areas -- apply 250 to 500 pounds per acre and incorporate immediately to a depth of 4 to 6 inches. Seasonal control of annual weeds will also be obtained. Containers of plants listed above may be placed on treated soil immediately. Do not transplant into treated soil.

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VINYL POOL LINERS: Nutsedge can penetrate vinyl pool liners used in above ground pools. For control, apply at a rate of seven pounds per 1,000 square feet, immediately after the final grading has been achieved, use a tiller or rake to mix into the top two to four inches of soil. After pool installation has been completed, twelve to eighteen inches of the perimeter should be cleared of grass and soil treated. It is recommended that the perimeter be treated annually.

SUGGESTED TREATMENT GUIDE

Pool Size	Amount Needed
18' round	2.0 pounds
21' round	2.7 pounds
24' round	3.4 pounds
27' round	4.3 pounds
12 x 18' oval	1.6 pounds
12 x 24' oval	2.2 pounds
15 x 27' oval	3.0 pounds
15 x 30' oval	3.4 pounds
15 x 32' oval	3.6 pounds
18 x 33' oval	4.4 pounds

UNDER ASPHALT: For general weed control under asphalt (in areas such as roadways, parking lots, recreational areas), after final grade is achieved, apply 250 to 300 pounds per acre. (5 3/4 to 7 pounds per 1,000 sqft.). Treated area should be covered with asphalt as soon as possible. For resurfacing work, existing weeds should be sprayed with a contact herbicide prior to application.

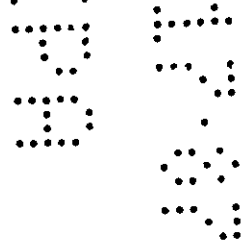
WARRANTY:

The manufacturer warrants that the chemical composition conforms to the ingredient statement given on the label and that this product is suited for the labeled uses when applied according to label directions. Because of widely varying use conditions, it is impossible to eliminate all risks even when label directions are followed. Therefore, the manufacturer makes no other implied or expressed warranty nor is any agent of the manufacturer allowed to do so. Upon purchase of this product, the buyer assumes all risks associated with use of this product. In the event of damage resulting from a breach of warranty, the buyer agrees to accept a refund of the purchase price of the product as full discharge of the manufacturer's liability.

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✓ EPA REG. NO. 2217-675  
 ✓ EPA EST. NO.

✓ Mfd. by PBI/Gordon Corporation  
 Kansas City, Kansas 66118



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