



**OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION**

WASHINGTON, D.C. 20460

April 29, 2025

Eric D. Smith  
Director, Regulatory Affairs  
PBI/Gordon Corporation  
P.O. Box 860350  
Shawnee, Kansas 66286

Subject: Label Amendment - Registration Review Mitigation for Dichlobenil  
Product Name: Acme Agricultural Products Norosac 4G Dichlobenil Herbicide  
EPA Registration Number: 2217-675  
Application Date: May 17, 2019  
Decision Number: 596969

Dear Eric D. Smith:

The Agency, in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Dichlobenil Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide, Fungicide, and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. You must

submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Concepción Rodríguez by phone at 202-566-0820, or via email at [rodriguez.concepcion@epa.gov](mailto:rodriguez.concepcion@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Linda Arrington", with a stylized flourish at the end.

Linda Arrington, Branch Chief  
Risk Management and Implementation Branch 4  
Pesticide Re-Evaluation Division  
Office of Pesticide Programs

ENCLOSURE: Stamped label

DICHLLOBENIL	GROUP	20	HERBICIDE
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# ACME® AGRICULTURAL PRODUCTS

## NOROSAC® 4G DICHLLOBENIL HERBICIDE

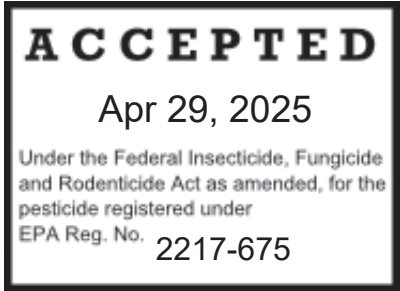
EPA Reg. No. 2217-675

ACTIVE INGREDIENT:	
Dichlobenil: 2,6-dichlorobenzonitrile .....	4.0%
INERT INGREDIENTS: .....	96.0%
TOTAL .....	100.0%

ACME® is a registered trademark of PBI/Gordon Corporation.  
 NOROSAC® is a registered trademark of PBI/Gordon Corporation.

KEEP OUT OF REACH OF CHILDREN

### CAUTION



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

### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

**CAUTION:** Harmful if swallowed or absorbed through skin or inhaled. Avoid contact with eyes, skin or clothing. Avoid breathing dust.

#### Personal Protective Equipment (PPE)

Applicators and handlers must wear a minimum of:

- Long-sleeved shirt and
- long pants
- Socks and shoes
- waterproof gloves
- Wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N, R or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.

For the following scenarios all handlers must also wear minimum of a respirator and single layer with gloves:

- For mixing/loading granules using tractor-drawn spreader on non-crop areas, and non-agricultural ornamentals (such as woody trees and shrubs), shelterbelt plantings
- For mixing/loading granules using tractor-drawn spreader for typical field crops (blueberry lowbush), caneberries, and rhubarb
- For loading/applying granules with a rotary spreader on non-agricultural ornamentals and non-crop areas
- For applying granules with shaker can under asphalt and under vinyl pool/pond liners and non-crop areas

- For applying granules with tractor-drawn spreader for non-crop areas



- For applying granules with tractor-drawn spreader for blueberry (lowbush)
- For loading/applying granules with a rotary spreader under asphalt and under vinyl pool/pond liner

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### First Aid

<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 - 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-877-800-5556 for emergency medical treatment advice.	

### Environmental Hazards

Cover, collect, or incorporate granules spilled on the soil surface. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater.

### Groundwater Advisory

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow may result in groundwater contamination.

### Non-Target Organism Advisory

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

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**SUBLABEL 1**  
**No longer commercialized**

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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.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Aerial application prohibited.

### **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170.

This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

Exception: If the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

For early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, wear: coveralls, chemical resistant gloves made of any waterproof material, and shoes plus socks.

### **Non-Agricultural Use Requirements**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep unprotected persons out of the treated areas until sprays have dried.

**For uses on ornamental woody shrubs and vines, ornamental/shade trees, and residential and commercial landscaping:** Do not enter or allow others to enter the treated area until granules are thoroughly watered in and the treated soil has dried.

## **RESISTANCE MANAGEMENT**

For resistance management, this product contains a Group 20 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 20 herbicide. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same area. Appropriate resistance management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

- Rotate the use of this product or other Group 20 herbicide within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or pest control advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use, and that considers mechanical control methods, cultural (e.g., timing to favor the turf and not the weeds), biological (weed-competitive varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: 1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; 2) a spreading patch of non-controlled plants of a particular weed species; 3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method. Prevent movement of resistant weed seeds to other areas by cleaning equipment.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or pest control advisor for additional pesticide resistance-management and/or integrated weed-management recommendations for specific types of turf and weed biotypes.
- For further information or to report suspected resistance, call 877-800-5556.

#### **PERENNIAL WEED CONTROL:**

This product is recommended for control of certain perennial weeds such as Artemisia, Bluegrass, Canada Thistle, Curly Dock, Dandelion, Dogfennel, False Dandelion (Catsear), Fescue, Horsetail, Leafy Spurge, Natalgrass, Orchardgrass, Plantain, Quackgrass, Russian Knapweed, Timothy, Wild Artichoke, Wild Aster, Yellow Rocket, and Yellow Woodsorrel in established woody ornamentals and fruit and for control in noncrop areas such as along roads and highways, parks, around buildings, hedges and trees, play and sports grounds, along fences, railroad and utility right-of-ways and installations.

#### **ANNUAL AND BIENNIAL WEED CONTROL:**

This product is recommended for control of annual and biennial grass and broadleaf weeds such as: Annual Bluegrass (*Poa annua*), Bull Thistle, Camphorweed, Carpetweed, Chickweed, Citronmelon, Coffeeweed, Crabgrass, Cudweed, Evening Primrose, Fiddleneck, Florida Purslane (*Pusley*), Foxtail, Groundsel, Henbit, Jerusalem Oak Goosefoot, Knotweed, Lambsquarters, Maypops, Climbing Milkweed, Miner's Lettuce, Old Witchgrass, Pepperweed, Pineappleweed, Purslane, Ragweed, Deadnettle, Redroot Pigweed, Rosarypea, Russian Thistle, Shepherdspurse, Smartweed, Spanishneedles, Spurge, Teaweed, Texas Panicum, Wild Barley, Wild Carrot, Wild Mustard, and Wild Radish.

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 states. In other areas, shallow incorporation or sprinkler irrigation is suggested when applications are made during periods of high temperatures.

For the following scenarios all handlers must also wear minimum of a respirator and single layer with gloves:

- For mixing/loading granules using tractor-drawn spreader on non-crop areas, and non-agricultural ornamentals (such as woody trees and shrubs), shelterbelt plantings

- For loading/applying granules with a rotary spreader on non-agricultural ornamentals and non-crop areas
- For applying granules with tractor-drawn spreader for non-crop areas

#### USE PRECAUTIONS FOR WOODY ORNAMENTALS (ESTABLISHED AND NURSERY STOCK):

- Do not use in seedbeds, 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 runoff 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 sandy soil.
- Do not graze livestock in treated areas.
- Avoid applications which allow Norosac® 4G Dichlobenil Herbicide to lodge in the foliage, particularly in conifer species, such as pines, yews, etc.
- Do not allow Norosac® 4G Dichlobenil Herbicide to accumulate and be in contact with trunk at or below soil line.
- Do not apply this product by backpack applicator.

#### WOODY ORNAMENTALS (ESTABLISHED AND NURSERY STOCK):

For control of annual weeds this product may be used on the following plants. Apply 100 to 150 pounds of product 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 of product per acre. Do not apply more than 150 pounds of product per acre on Azalea, Boxwood, Euonymus, Forsythia, Heather, Holly, Ivy, Lilac, Leucothoe. Do not apply more than 150 pounds of product 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	Eastern red cedar	Honeysuckle	Photinia
Arborvitae	Elm	Juniper	Pine*
Ash	Elwood false cypress*	Kinnikinnick	Pittosporum
Azalea <sup>1</sup>	English ivy ( <i>Hedera helix</i> )	Laurel	Podocarpus
Barberry	English walnut	Leucothoe	Poplar
Beauty bush	(Ornamental)	Lilac	Privet
Birch	Euonymus	Linden	Pyracantha
Boxelder	Filbert (Ornamental)	Locust	Rhododendron
Boxwood	Flowering almond	Magnolia	Rockrose
Camellia	Flowering quince	Maple*	Rose
Caragana	Forsythia	Mock orange	Russian olive
Cleyera ( <i>Cleyera japonica</i> )	Gardenia	Mountain ash	Spirea
Cotoneaster	Goldenraintree	Nandina	Squawcarpet
Cottonwood	Hackberry	Oak	Willow*
Crabapple (Ornamental)	Heather	Osmanthus (Holly-olive)	Weigela
Deutzia	Holly ( <i>Ilex</i> spp.) <sup>2</sup>	Paxistima	Yew ( <i>Taxus</i> )
Dogwood	Honeylocust	Pecan (Ornamental)	

<sup>1</sup> Kurume, Mollis, Hardy hybrid types and hardy native species only.  
<sup>2</sup> Except *I. crenata*, *I. rotunda*, *I. vomitoria*  
\* Not for use on these species within the State of California. Pine species are sensitive to injury from Norosac® 4G Dichlobenil Herbicide if applied within two years after transplanting.

#### SOIL SURFACE TREATMENT:

Spring and fall applications are effective. 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 soil has thawed. Do not apply to frozen soil or over the top



of the snow. Old weed growth should not be removed before application. Do not make surface applications to areas which have been cultivated during the fall or summer prior to application.

#### **SOIL TREATMENT WITH INCORPORATION:**

If practical, shallow incorporation may increase the effectiveness of weed control. Apply and incorporate immediately after application in late fall or very early spring.

#### **TREATMENTS ON GROUND (SOIL OR GRAVEL) IN LINERS IN WHICH ORNAMENTAL STOCK WILL BE PLACED:**

Thoroughly incorporate the granules into the soil (or other target surface) through watering-in. Once the application has been properly incorporated through watering-in and the treated surface is dry, the WPS permits workers to enter the treated area during the restricted-entry interval without personal protective equipment or any other restriction if they are performing tasks that do not involve contact with the soil subsurface.

#### **FRUIT IN ORCHARDS AND NURSERIES:**

For the following scenarios all handlers must also wear minimum of a respirator and single layer with gloves:

- For mixing/loading granules using tractor-drawn spreader for typical field crops (blueberry lowbush), caneberries, and rhubarb
- For applying granules with tractor-drawn spreader for blueberry (lowbush)

Only apply in the fall after harvest to the following spring. Do not plant rotational crops, on which dichlobenil is not registered, in treated soil within one (1) year after application. Do not allow livestock to graze treated orchards. This product may be used on the following crops:

- A. Apple, Blueberry, Cherry, Grape, Pear:** 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 of product per acre per year for annual weed control based on area actually treated. For control of perennial weeds apply 150 pounds of product per acre [6 lb dichlobenil ai per acre per year]. 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 of product per acre per year [4 lb dichlobenil ai per acre per year]. Do not apply during new shoot emergence.

#### **WEED CONTROL IN CRANBERRIES:**

Control of perennial, annual, and biennial broadleaf and grass 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, Short Wiregrass, Wideleaf grass, Stargrass, Woolgrass, Cotton grass, Needlegrass, Oniongrass, Arrowleaved Tear Thumb, Beggarsticks, 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).

#### **CRANBERRIES**

##### **USE RATE:**

100 pounds of Norosac® 4G Dichlobenil Herbicide per acre per year. 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-budbreak or postharvest.

Multiple applications may be made as needed. Allow an interval of 3 to 6 weeks between treatments. Do not exceed 100 pounds of product per acre per year [4 lb dichlobenil ai per acre per year].



**USE PRECAUTIONS FOR CRANBERRIES:**

- 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 beds or newly sanded beds or on bogs prior to or immediately after mowing for vines.
- Do not apply after cranberry plants start to bloom as yields may be reduced.
- Use lower rates on bogs with sandy soil or weak vines.
- Only apply in the fall after harvest to the following spring.

**NUTSEDGE CONTROL:**

To control nutsedge on mineral soils in areas on which containers of nursery stock are to be grown or held and in noncrop areas apply 250 pounds of product 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.

**VINYL POOL LINERS:**

For the following scenarios all handlers must also wear minimum of a respirator and single layer with gloves:

- For applying granules with shaker can under asphalt and under vinyl pool/pond liners and non-crop areas
- For loading/applying granules with a rotary spreader under asphalt and under vinyl pool/pond liner

Nutsedge can penetrate vinyl pool liners used in above ground pools. For control, apply at a rate of 5.75 pounds of product per 1,000 square feet, immediately after the final grading has been achieved. Use a tiller or rake to mix into the top 2 to 4 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	Treatment Needed
18 ft round	1.5 to 2.0 pounds
21ft round	2.0 to 2.7 pounds
24 ft round	2.6 to 3.4 pounds
27 ft round	3.3 to 4.3 pounds
12 x 18 ft oval	1.0 to 1.6 pounds
12 x 24 ft oval	1.2 to 2.2 pounds
15 x 27 ft oval	1.8 to 3.0 pounds
15 x 30 ft oval	2.0 to 3.4 pounds
15 x 32 ft oval	2.2 to 3.6 pounds
18 x 33 ft oval	2.7 to 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 pounds of product per acre (5.75 pounds of product per 1,000 square feet). 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.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow may result in groundwater contamination.

**(FOR PAPER AND PLASTIC BAGS WITH CAPACITIES OF 25 AND 50 POUNDS)**

**STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage and disposal.

**PESTICIDE 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:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING:** Nonrefillable container: Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or 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.

**(FOR FOUR POUND SHAKER CONTAINER, Rigid Plastic Containers – Nonrefillable with capacity of 4 pounds)**

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage and disposal.

**PESTICIDE 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. Do not store near seeds, bulbs, or in greenhouse.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available or dispose of in a sanitary landfill, or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**LIMITED WARRANTY AND DISCLAIMER**

The manufacturer warrants only that the chemical composition of this product conforms to the ingredient statement given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED. This limited warranty does not extend to the use of the product inconsistent with label instructions, warnings or cautions, or to use of the product under abnormal conditions such as drought, excessive rainfall, tornadoes, hurricanes, etc. These factors are beyond the control of the manufacturer or the seller. Any damages arising from a breach of the manufacturer's warranty shall be limited to direct

damages, and shall not include indirect or consequential damages such as loss of profits or values, except as otherwise provided by law.

The terms of this Limited Warranty and Disclaimer cannot be varied by any written or verbal statements or agreements. No employee or agent of the seller is authorized to vary or exceed the terms of this Limited Warranty and Disclaimer in any manner.

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**SUBLABEL 2**  
**Currently commercialized**

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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.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown in ornamental gardens or parks, or on golf courses or lawns and grounds.

Keep unprotected persons out of treated areas until sprays have dried.

Barrier® Ornamental Landscaping Herbicide is recommended for use in all established landscape plantings in institutional, ornamental, and residential sites. Barrier® Ornamental Landscaping Herbicide is intended to be applied by lawn care operators, service technicians, maintenance applicators, and other landscape personnel.

Institutional sites are defined as areas around properties or facilities providing a service to public or private organizations including, but not limited to, hospitals, nursing homes, schools, museums, libraries, sport facilities, golf courses, and office buildings. Ornamental sites include established plantings around residences, parks, streets, retail outlets, cemeteries, industrial and institutional buildings. Finally, residential sites are defined as areas associated with the household or home life including, but not limited to apartment complexes, condominiums, and patient care areas of nursing homes, mental institutions, hospitals, or convalescent homes.

Barrier® Ornamental Landscaping Herbicide can be used for residual weed control in these noncropland areas:

- Around trees, shrubs, hedges, woody ornamentals, nonbearing fruit trees (ornamental), and certain groundcovers established in shelterbelts, windbreaks, and landscape plantings.
- Under fencelines, along fences, driveways, parking areas, parking lots, and borders of flower beds.
- Along roads and highways and under guard rails.
- Along golf cart pathways, sidewalks, and cemetery memorials.
- Around residences, buildings, and other outbuildings.

For the following scenarios all handlers must also wear minimum of a respirator and single layer with gloves:

- For mixing/loading granules using tractor-drawn spreader on non-crop areas, and non-agricultural ornamentals (such as woody trees and shrubs), shelterbelt plantings
- For loading/applying granules with a rotary spreader on non-agricultural ornamentals and non-crop areas
- For applying granules with tractor-drawn spreader for non-crop areas
- For applying granules with shaker can in non-crop areas

## **RESISTANCE MANAGEMENT**

For resistance management, this product contains a Group 20 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 20 herbicide. The resistant

biotypes may dominate the weed population if these herbicides are used repeatedly in the same area. Appropriate resistance management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

- Rotate the use of this product or other Group 20 herbicide within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or pest control advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use, and that considers mechanical control methods, cultural (e.g., timing to favor the turf and not the weeds), biological (weed-competitive varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: 1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; 2) a spreading patch of non-controlled plants of a particular weed species; 3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method. Prevent movement of resistant weed seeds to other areas by cleaning equipment.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or pest control advisor for additional pesticide resistance-management and/or integrated weed-management recommendations for specific types of turf and weed biotypes.
- For further information or to report suspected resistance, call 877-800-5556.

#### LANDSCAPE PLANTINGS:

Barrier® Ornamental Landscaping Herbicide is recommended for use around the established landscape ornamentals listed below:

Barrier® Ornamental Landscaping Herbicide is not recommended for flower gardens, wildflowers, foliage plants, or flowering bulbs.

Amur corktree	Eastern red cedar	Honeysuckle	Photinia
Arborvitae	Elm	Juniper	Pine*
Ash	Elwood false cypress*	Kinnikinnick	Pittosporum
Azalea <sup>1</sup>	English ivy ( <i>Hedera helix</i> )	Laurel	Podocarpus
Barberry	English walnut	Leucothoe	Poplar
Beauty bush	(Ornamental)	Lilac	Privet
Birch	Euonymus	Linden	Pyracantha
Boxelder	Filbert (Ornamental)	Locust	Rhododendron
Boxwood	Flowering almond	Magnolia	Rockrose
Camellia	Flowering quince	Maple*	Rose
Caragana	Forsythia	Mock orange	Russian olive
Cleyera ( <i>Cleyera japonica</i> )	Gardenia	Mountain ash	Spirea
Cotoneaster	Goldenraintree	Nandina	Squawcarpet
Cottonwood	Hackberry	Oak	Willow*
Crabapple (Ornamental)	Heather	Osmanthus (Holly-olive)	Weigela
Deutzia	Holly ( <i>Ilex</i> spp.) <sup>2</sup>	Paxistima	Yew ( <i>Taxus</i> )
Dogwood	Honeylocust	Pecan (Ornamental)	

<sup>1</sup> Kurume, Mollis, Hardy hybrid types and hardy native species only.

<sup>2</sup> Except *I. crenata*, *I. rotunda*, *I. vomitoria*

\* Not for use on these species within the State of California. Pine species are sensitive to injury from Norosac® 4G Dichlobenil Herbicide if applied within two years after transplanting.

#### **SOIL SURFACE TREATMENT:**

Spring and fall applications are effective. 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 soil has thawed. Do not apply to frozen soil or over the top of the snow. Old weed growth should not be removed before application. Do not make surface applications to areas which have been cultivated during the fall or summer prior to application.

#### **SOIL TREATMENT WITH INCORPORATION:**

If practical, shallow incorporation may increase the effectiveness of weed control. Apply and incorporate immediately after application in late fall or very early spring.

#### **TREATMENTS ON GROUND (SOIL OR GRAVEL) IN LINERS IN WHICH ORNAMENTAL STOCK WILL BE PLACED:**

Thoroughly incorporate the granules into the soil (or other target surface) through watering-in. Once the application has been properly incorporated through watering-in and the treated surface is dry, the WPS permits workers to enter the treated area during the restricted-entry interval without personal protective equipment or any other restriction if they are performing tasks that do not involve contact with the soil subsurface.

#### **ANNUAL AND BIENNIAL WEED CONTROL:**

This product is recommended for control of annual grass and broadleaf weeds such as: Annual Bluegrass (*Poa annua*), Bull Thistle, Camphorweed, Carpetweed, Chickweed, Citronmelon, Coffeeweed, Crabgrass, Cudweed, Evening Primrose, Fiddleneck, Florida Purslane (*Pusley*), Foxtail, Groundsel, Henbit, Jerusalem Oak Goosefoot, Knotweed, Lambsquarters, Maypops, Climbing Milkweed, Miner's Lettuce, Old Witchgrass, Pepperweed, Pineappleweed, Purslane, Ragweed, Deadnettle, Redroot Pigweed, Rosarypea, Russian Thistle, Shepherdspurse, Smartweed, Spanishneedles, Spurge, Teaweed, Texas Panicum, Wild Barley, Wild Carrot, Wild Mustard, and Wild Radish.

#### **PERENNIAL WEED CONTROL:**

This product is recommended for control of certain perennial weeds such as *Artemisia*, Bluegrass, Canada Thistle, Curly Dock, Dandelion, Dogfennel, False Dandelion (*Catsear*), Fescue, Horsetail, Leafy Spurge, Natalgrass, Orchardgrass, Plantain, Quackgrass, Russian Knapweed, Timothy, Wild Artichoke, Wild Aster, Yellow Rocket, 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 states. In other areas, shallow incorporation or sprinkler irrigation is suggested when applications are made during periods of high temperatures.

#### **APPLICATION RATES:**

For annual and biennial weeds apply 100 to 150 pounds of product per acre. For perennial weeds listed, apply 150 to 200 pounds of product per acre. Do not apply more than 150 pounds of product per acre on Azalea, Boxwood, Euonymus, Forsythia, Heather, Holly, Ivy, Lilac, Leucothoe. Do not apply until 4 weeks after transplanting. Do not apply more than 150 pounds of product per acre on plantings less than one year old.

**Table 1. Application rates of Barrier® Ornamental Landscaping Herbicide for annual, biennial, and perennial weed control.**

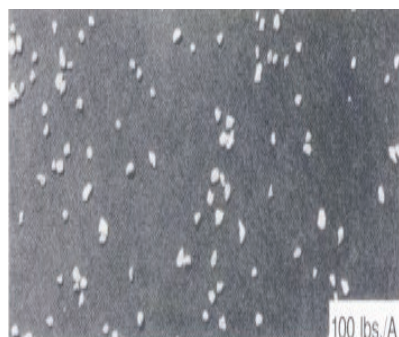
Weeds	Amount of Product	Approximate Treated Area for this Bag Size
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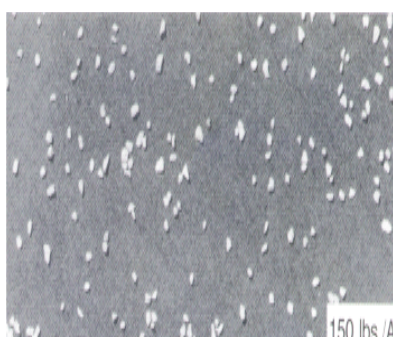
	Pounds/Acre	Pounds/1,000 Sq.Ft.	Bag Size	Sq.Ft.
Annual and Biennial Weeds	100 to 150	2.3 to 3.4	25 lb bag size	11,000 to 7,000
			50 lb bag size	22,000 to 14,000
Perennial Weeds	150 to 200	3.4 to 4.6	25 lb bag size	7,000 to 5,000
			50 lb bag size	14,000 to 11,000

#### EQUIPMENT CALIBRATION:

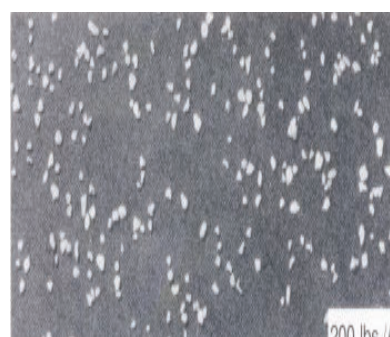
Determine the size of the treatment area, select the appropriate application rate, and calibrate the granular spreader. These three diagrams show the distribution pattern of the granules and will help with your equipment calibration.



100 Pounds of Product/Acre



150 Pounds of Product/Acre



200 Pounds of Product/Acre

#### USE PRECAUTIONS:

- Do not use in seedbeds, transplant or cutting beds, commercial nurseries or greenhouses. Do not apply until 6 months after planting rooted cuttings.
- Do not apply to areas on slopes above lawns or susceptible crops as runoff from treated area could cause injury.
- Do not exceed the maximum recommended amount per growing season. Do not use on "St. Lucie fine sand", "Arzell fine sand" or other light sandy soil.
- Do not graze livestock in treated areas.
- Avoid applications which allow Barrier® Ornamental Landscaping Herbicide to lodge in the foliage, particularly in conifer species, such as pines, yews, etc.
- Do not allow Barrier® Ornamental Landscaping Herbicide to accumulate and be in contact with trunk at or below soil line.
- Do not apply this product by backpack applicator.
- Aerial application prohibited.

#### UNDER ASPHALT:

For general weed control under asphalt (in areas such as roadways, parking lots, recreational areas), after final grade is achieved, apply 250 pounds of product per acre (5¾ pounds of product per 1,000 square feet). 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.

For the following scenarios all handlers must also wear minimum of a respirator and single layer with gloves:

- For loading/applying granules with a rotary spreader under asphalt.
- For applying granules with shaker can under asphalt and non-crop areas.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow may result in groundwater contamination.



**(FOR PAPER AND PLASTIC BAGS WITH CAPACITIES OF 25 AND 50 POUNDS)**

**STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage and disposal.

**PESTICIDE 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:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING:** Nonrefillable container: Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or 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.

**(FOR FOUR POUND SHAKER CONTAINER, Rigid Plastic Containers – Nonrefillable with capacity of 4 pounds)**

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage and disposal.

**PESTICIDE 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. Do not store near seeds, bulbs, or in greenhouse.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available or dispose of in a sanitary landfill, or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**LIMITED WARRANTY AND DISCLAIMER**

The manufacturer warrants only that the chemical composition of this product conforms to the ingredient statement given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED. This limited warranty does not extend to the use of the product inconsistent with label instructions, warnings or cautions, or to use of the product under abnormal conditions such as drought, excessive rainfall, tornadoes, hurricanes, etc. These factors are beyond the control of the manufacturer or the seller. Any damages arising from a breach of the manufacturer's warranty shall be limited to direct damages, and shall not include indirect or consequential damages such as loss of profits or values, except as otherwise provided by law.

The terms of this Limited Warranty and Disclaimer cannot be varied by any written or verbal statements or agreements. No employee or agent of the seller is authorized to vary or exceed the terms of this Limited Warranty and Disclaimer in any manner.

## **APPENDIX**

### **1. Statements which may appear on different label components depending on packaging configuration.**

- See next panel for additional Precautionary Statements and First Aid
- Net Contents: \_\_\_\_\_
- EPA Est. No. \_\_\_\_\_

### **2. Advertising claims that may be presented on container labeling, advertisements, brochures, and other marketing/sales promotional materials:**

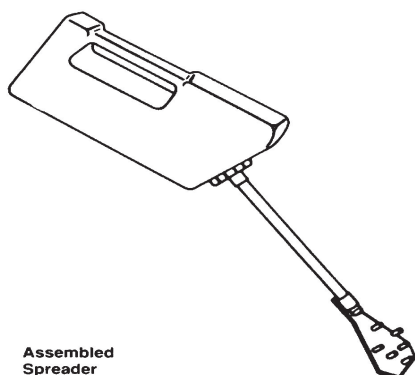
- A Selective Herbicide For Control Of Crabgrass, Foxtail, Shepherdspurge, Horsetail, Pigweed, Quackgrass, Canada Thistle, Leafy Spurge, Fescue, and Certain Other Annual and Perennial Weeds.
- A selective herbicide for control of annual and perennial grasses and weeds in noncrop areas: Landscape ornamentals not grown for commercial sale, parks, along roads & highways, around buildings, hedges, trees, sports grounds, along fences.
- VAPOR BARRIER® HERBICIDE
- Alternate Brand Name: BARRIER® ORNAMENTAL LANDSCAPING HERBICIDE

## **INSTRUCTIONS FOR GRAVITY FLOW APPLICATOR**

### **HOW TO ASSEMBLE THE SPRED-RITE® 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.

4. 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 to slow down the flow of the granules.
5. Side delivery of granules: The operator can direct the granules out to the side and under hedges, bleachers, guardrails, etc. while walking straight ahead. Hold spreader parallel to the body, but with deflector positioned sideways.
6. The amount of granules applied will depend on the orifice disk used and the speed the person walks while making the application.
7. 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**



### **DOCUMENT CONTROL INFORMATION**

1. **Unique Label Identifier:** 002217-00675.20240604.amend-proposed-clean
2. **Reason for Issue:** EPA Comments #2 + Registration Review - Dichlobenil