PM 23 100-715

(Front Panel)

Derby®

Granular Herbicide

For weed control in nurseries, Christmas tree plantations, and landscape plantings.

40 Pounds Net Weight

Active Ingredients:

Metolachlor: 2-chloro-N-(2-ethyl-o-methylphenyl)-	
N-(2-methoxy-1-methylethyl) acetamide	4.0%
Simazine: 2-chloro-4.6-bis(ethylamino)-s-triazine	1.0%
<pre>Inert Ingredients:</pre>	95.0%
Total	100.0%

Product ID. 56800 (40 lbs.)

Derby is a granular herbicide

KEEP OUT OF REACH OF CHILDREN

CAUTION

See additional precautionary statements and directions for use on back of bag.

EPA Reg. No. 100-715

EPA Est. 5905-IA-1

CIBA-GEIGY

(Back Panel)

DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire <u>Directions for Use</u> and the <u>Conditions of Sale and Warranty</u> before using this product. If terms are not acceptable, return the unopened product container at once.

Conditions of Sale and Warranty

The <u>Directions for Use</u> of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application all of which are beyond the control of CIBA-GEIGY or the Seller. All such risks shall be assumed by the Buyer.

CIBA-GEIGY warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the <u>Directions for Use</u> subject to the inherent risks referred to above. <u>CIBA-GEIGY makes no other express or implied warranty of Fitness or Merchantatility or any other express or implied warranty. In no case shall CIBA-GEIGY or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. CIBA-GEIGY and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing <u>Conditions of Sale and Warranty</u>; which may be varied only by agreement in writing signed by a duly authorized representative of CIBA-GEIGY.</u>



DIRECTIONS FOR USE

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

No user shall permit the application of this product in such a manner as to directly or indirectly expose workers or other persons except those knowingly involved in the application. The area being treated must be vacated by unprotected persons.

Reentry Statement

Do not enter treated areas without protective clothing until dust has settled.

Because certain states may require more restrictive reentry intervals for variou. crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must be given which inform workers of areas or fields the may not be entered without specific protective clothing until dust has settled, and appropriate actions to take as described under Precautionary Statements at the end of this label. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: "CAUTION. Area treated with Derby" on (date of application). Do not enter without appropriate protective clothing until dust has settled. In case of accidental exposure, flush eyen or skin with plenty of water. Call a physician if irritation persists. Remove and wash contaminated clothing before reuse."

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, AND/OR ILLEGAL RESIDUES.

General Inform tion

Derby is a granular herbicide containing the active infredicits. metolachlor and simazine. Derby will control many annual grasses, certain broadleaf weeds, and yellow nutsedge in land-scapes, conifers in nurseries and plantations (including christmas trees), and nurseries with container-, field-, or liner-grown ornamentals.

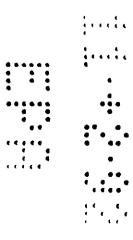


DO NOT USE IN GREENHOUSES OR OTHER ENCLOSED STRUCTURES.

NOTICE TO USER: Plant tolerances to Derby herbicide have been found to be acceptable in the specific genera and species listed on this label. Because of the large number of species and varieties of plants, it is impossible to test each for tolerance to Derby. Neither the manufacturer nor the seller has determined whether or not Derby can be used safely on plants not specified on this label. The professional user should determine if Derby can be used safely before using commercially. In a small area, test the recommended rates for a particular group of unlabeled plants for phytotoxicity before widespread use.

Nurseries. Christmas Tree Plantations, and Landscape Plantings

Apply Derby using a rotary or drop spreader at rates indicated below for control of many annual grasses, certain broadleaf weeds and yellow nutsedge. Calibrate spreader before application according to the manufacturer's directions. Refer to the chart below for suggested settings. Settings are only reference points for calibration. Use care in setting the gauges since slight changes affect the flow greatly. Because of variations in equipment, equipment age and condition, humidity, variations in walking speed, and other variables, these settings should not be used without first checking them through calibration.



Suggested Applicator Settings*

Rate Per Acre	60 lbs.	80 lbs.	100 lbs.
Rate Per 1,000 sq. ft.	1.4 lbs.	1.8 lbs.	2.3 lbs.
Oz. per 1,000 sq. ft.	22.0 oz.	29.4 oz.	36.7 oz.
Applicator Brand			
Scott R-7	A + 3/10	A + 9/10	B + 5/10
Scott R-8	G + 3/10	G + 5/10	G + 7/10
Lesco	B + 2/10	B + 7/10	C + 2/10
Warren T	2 + 8/10	3 + 1/10	3 + 4/10
Cyclone/Stryker	2 + 3/10	2 + 4/10	2 + 6/10

*The Lesco and the Scott spreaders have letters instead of numbers for the gauge setting points. In the table above, the letter is used just as though it were a number. For example, the Lesco spreader (at the 60 lbs. per acre rate) setting is B + 2/10, or at 2 tenths of the distance from B to C.

Weeds Controlled

Grasses and Sedges

annual bluegrass
barnyardgrass
(watergrass)
crabgrass
crowfootgrass
fall panicum
foxtail millet
giant foxtail
goosegrass
green foxtail
Mexican sprangletop
prairie cupgrass

red rice
signalgrass
(Brachiaria)
southwestern
cupgrass
witchgrass
yellow foxtail
yellow nutsedge

Broadleaf Plants

black nightshade carpetweed chickweed evening primrose
Florida pusley
galinsoga
henbit
pigweed
prickly lettuce
ragweed
Shepherd's purse
spotted spurse

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Weeds Partially Controlled*: common purslane, groundsel, hairy nightshade, sandbur, seedling johnsongrass, shattercane and volunteer sorghum.

*Control of these weeds can be erratic due partly to variable weather conditions.

Note: If you plan to use Derby to control weed species not listed on this label, check with your local weed specialist or test Derby on a small-scale basis before applying.

Application

Broadcast Derby at rates shown below. Apply before grass, broadleaf weeds or yellow nutsedge emerge, or after existing weeds or nutsedge have been removed. A second application may be needed to provide grass and yellow nutsedge control for an extended period. Do not make more than 2 applications per year (160 lbs./A).

Suggested Rates of Derby

Soil Texture	Lbs./A*	Lbs./1,000 sq. ft.
Coarse	60	1.4
Medium	60-80	1.4 - 1.8
rine	80-100	1.8 - 2.3

*Use the higher rate for a given soil texture on soils with high organic matter content and where yellow nutsedge and/or a heavy intestation of other weeds is expected. Use the lower rates on soils with low organic matter content, and where light infestations of grass weeds are expected. In peat and muck soils and soils highly enriched with organic matter (i.e., sawdust) and/or synthetic soil mixes, the activity of Derby may be reduced.

If banded applications are used, calculate the amount of Derby needed as follows:

Band width in inches X Broadcast Rate = Banded Rate
Row Spacing in inches Per Acre Ber Acre

Precautions: 1) To avoid plant injury, do not apply Derby to seedbeds, cutting beds, or unrooted cuttings before transplanting or to plants until the soil has firmly settled around roots. 2) If Derby granules adhere to the foliage after application, follow with sufficient overhead irrigation to wash Derby from the foliage to reduce the chance of injury.

Derby has been found to be safe on the following plants:



Container-Grown Plants

Scientific Name

Aba . grandiflora Acer rubrum Auc ha japonica ris thunbergii вe. Bet .a nigra Bu: microphylla Bux. . sempervirens Carex spp. Cleyera japonica Cornus florida Cornus sericia Cotoneaster horizontalis Euonymous alata Forsythia intermedia Gardenia jasminoides Hedera helix Hosta lancifolia Ilex attenuata Ilex cornuta Ilex crenata Ilex vomitoria Illicium anisatum Juniperus chinensis Juniperus horizontalis Juniperus sabina Juniperus virginiana Leucothoe fontanesiana Ligustrum japonicum Liriope muscari *Liriope spicata* Myrica cerifera Nandina domestica Ophiopogon japonicus Oxydendrum arboreum Pachysandra terminalis Photinia glabra Pinus strobus Pinus thunbergiana Pinus virginiana Pittosporum tobira Podocarpus macrophyllus Potentilla spp. Quercus phellos Rhododendron catawbiense Rhododendron indicum Rhododendron maximum Rhododendron obtusum Taxus cuspidata Thuja occidentalis Tsuga canadensis Viburnum spp. Yucca filamentosa

Common Name

Glossy Abelia Red Maple Japanese Laurel Japanese Barberry River Birch Japanese Boxwood Common Boxwood Carex Cleyera Flowering Dogwood Red-osier Dogwood Cotoneaster Winged Euonymous Forsythia Gardenia English Ivy Hosta Holly Chinese Holly Japanese Holly Yaupon Holly Chinese Anise, Spicebush Chinese Juniper Juniper Savin Juniper Eastern Red Cedar Doghobble Japanese Privet Liriope Creeping Liriope Wax Myrtle Heavenly Bamboo Mondo Grass Sourwood Japanese Pachysandra Japanese Photinia White Pine Japanese Black Pine Virginia Pine Japanese Pittosporum' Japanese Yew Cinquefoil Willow Oak Catawba Rholodendron, Azalea Rhododendron Azalea Japanese Yew American Arborvitae Canadian Hemlock

Viburnum

Adam's Needle Yucca



80/12

Field- and Liner*-Grown Plants, Plants in Landscape Plantings, and Christmas Tree Nurseries

*Plants transplanted in rows in a nursery or similar area for further growth before transplanting to final growing location (place of establishment).

Scientific Name

Abelia grandiflora Abies balsamea Abies concolor Abies fraseri Acer japonicum Acer palmatum Acer platanoides Acer rubrum Acer saccharinum Acer saccharum Aucuba japonica Berberis mentorensis Berberis thunbergii Betula nigra Buxus microphylla Buxus sempervirens Carex spp. Cleyera japonica Cornus florida Cornus sericia Cotoneaster horizontalis Cymphoricarpos spp. Elaeagnus angustifolia Elaeagnus pungens Euonymous alata Euonymous fortunei Euonymous japonica Forsythia intermedia Fraxinus americana Fraxinus pennsylvanica Gardenia jasminoides Hedera helix Hosta lancifolia Hydrangea macrophylla Ilex attenuata Ilex cornuta Ilex crenata Ilex vomitoria Illicium anisatum Juniperus chinensis Juniperus conferta Juniperus horizontalis Juniperus sabina Juniperus virginiana

Lagerstroemia indica

Common Name

Crape Myrtle

Glossy Abelia Balsam Fir White Fir Fraser Fir Japanese Maple Japanese Maple Norway Maple Red Maple Silver Maple Sugar Maple Japanese Laurel Mentor Barberry Japanese Barberry River Birch Japanese Boxwood Common Boxwood Carex Cleyera Flowering Dogwood Red-osier Dogwood Cotoneaster White Snowberry Russian Olive Elaeagnus Winged Euonymous Euonymous Japanese Euonymous Forsythia White Ash Green Ash Gardenia English Ivy Hosta Hydrangea Holly Chinese Holly Japanese Holly Yaupon Holly Chinese Anise, Spicebush Chinese Juniper Shore Juniper Juniper Savin Juniper Eastern Red Cedar

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Leucothoe axillaris Leucothoe fontanesiana Ligustrum japonicum Ligustrum ovalifolium Liqustrum vulqare Liriodendron tulipifera Liriope muscari Liriope spicata Malus floribunda Myrica cerifera Nandina domestica Ophiopogon japonicus Oxydendrum arboreum Pachysandra terminalis Photinia glabra Picea abies Picea glauca Picea pungens Pieris japonica Pinus mugo Pinus strobus Pinus syl estrus Pinus thumbergiana Pinus virginiana Pittosporum tobira Podocarpus macrophyllus Populus spp. Potentilla spp. Pyracantha coccinea Pyrus calleryana Quercus coccinea Quercus phellos Quercus rubra Raphiolepis indica Rhododendron catawbiense Rhododendron indicum Rhododendron maximum Rhododendron obtusum Rosa spp. Salix spp. Sorbus aucuparia Spiraea spp. Syringa vulgaris Taxus cuspidata Ternstroemia gymnanthera Thuja occidentalis Tilia cordata Tsuga canadensis Viburnum spp. Yucca filamentosa

Leucothoe Doghobble Japanese Privet California Privet Common Privet Tulip Poplar Liriope Creeping Liriope Japanese Crabapple Wax Myrtle Heavenly Bamboo Mondo Grass Sourwood Japanese Pachysandra Japanese Photinia Norway Spruce Black Hills Spruce Colorado Spruce Japanese Andromeda Mountain Pine White Pine Scotch Pine Japanese Black Pine Virginia Pine Japanese Pittosporum Japanese Yew Poplar Cinquefoil Fire Thorn Pear Scarlett Oak Willow Oak Red Oak Indian Hawthorne Catawba Rhododendron BEST AVAILABLE COPT Rhododendron Azalea

Willow
European Mountain Ash
Spiraea
Common Lilac
Japanese Yew
Ternstroemia
American Arborvitae
Small-leaved European Linden
Canadian Hemlock

Derby may also be applied before or after applications of other herbicides registered for ornamentals (e.g., Gallery®, Goal®, Ronstar®, Surflan®, etc.) to broaden the spectrum of control.

Rose

iburnum

Adam's Needle Yucca

Storage and Disposal

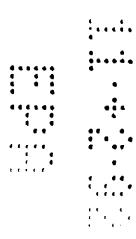
Pesticide

Store in a dry place. Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. Open dumping is prohibited. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container

Completely empty bag into application equipment. 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 from burning bags.

For minor spills, follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372 day or night.





Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

Statement of Practical Treatment

If in eyes: Flush with plenty of water. Call a physician if irritation persists.

<u>If on skin:</u> Wash with plenty of soap and water. Get medical attention if irritation persists.

Note to Physician: If Derby is ingested, induce emesis or lavage stomach.

Environmental Hazards

Cover or incorporate granules that are spilled during loading or are visible on soil surface in turn areas. Do not apply directly to water, 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 wash waters.

Ground Water and Surface Water Advisory

Metolachlor has been identified in limited sampling of ground water and there is the possibility that it may leach through the soil to ground water, especially where soils are coarse and ground water is near the surface. Following application and during rainfall events that cause runoff, metolachlor may reach surface water bodies including streams, rivers, and reservoirs.

Simazine is a chemical which can travel (seep or leach) through soil and enter ground water which may be used as drinking water. Simazine has been found in ground water as a result of its use as a herbicide. Users of this product are advised not to apply simazine where the water table (ground water) is close to the surface and where the soils are very permeable, i.e., well drained soils such as loamy sands. Users are advised to consult with their local agricultural agencies to obtain information on the location of ground water and the type of soil in their area.

Care must be taken when using this product to prevent spills or improper disposal of excess pesticide granules.



Derby® trademark of CIBA-GEIGY Corporation for metolachlor
Gallery® trademark of DowFlanco for isoxaben
Goal® trademark of Rohm and Haas Company for oxyfluorfen
Ronstar® trademark of Rhône-Poulenc for oxidiazon
Surflan® trademark of DowElanco for oryzalin
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CGA

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