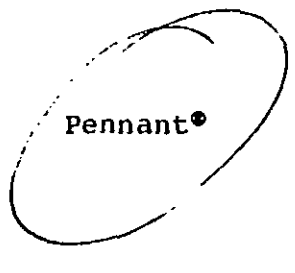


PENNANT® 5G - 40 BAG

- . SIGNAL WORD - 35 pt.
  - . KOROC - 28 pt.
  - . S&D - 22 pt.
  - . MAJOR HDGS. - 12 pt.
  - . TEXT - 12 pt.
  - . PRODUCT - 2 5/8"
- PMS 151 ORANGE  
PMS 356 GREEN



( (  
(Front Panel)

Granular Herbicide

For weed control in ornamentals and commercial landscapes

40 Pounds  
Net Weight

Active Ingredient:

Metolachlor: 2-chloro-N-(2-ethyl-6-methylphenyl)-	
N-(2-methoxy-1-methylethyl) acetamide .....	5.0%

<u>Inert Ingredients:</u>	<u>95.0%</u>
<u>Total</u>	<u>100.0%</u>

RECEIVED  
 AUG 13 1987  
 100-665

Control No. 54790

Pennant 5G is a granular herbicide

Keep Out of Reach of Children

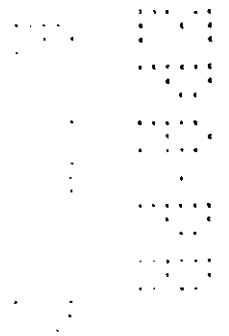
Caution

See additional precautionary statements on back of bag.

EPA Reg. No. 100-665

See directions for use on back of bag

CIBA-GEIGY



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(Back Panel)

DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product.

Conditions of Sale and Warranty

The Directions for Use 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 Directions for Use subject to the inherent risks referred to above. CIBA-GEIGY makes no other express or implied warranty of Fitness or Merchantability 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 Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of CIBA-GEIGY.

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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.

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 various crops treated with this product, consult your State Department of Agriculture for further information.

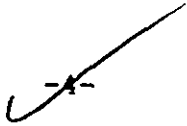
Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must be given which inform workers of areas or fields that may not be entered without specific protective clothing until dust has settled, and 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 Pennant 5G on (date of application). Do not enter without appropriate protective clothing until dust has settled. In case of accidental exposure, flush eyes 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 Information

Pennant 5G is a granular herbicide containing 5 percent of the active ingredient, metolachlor. Pennant 5G will control many

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annual grasses, certain broadleaf weeds, and yellow nutsedge in commercial landscapes and in a number of container-, field-, or liner-grown ornamentals.

Weeds Controlled

barnyardgrass (watergrass)	green foxtail	yellow foxtail
crabgrass	prairie cupgrass	yellow nutsedge
crowfootgrass	red rice	black nightshade
fall panicum	signalgrass	carpetweed
foxtail millet	(Brachiaria)	Florida pusley
giant foxtail	southwestern cupgrass	galinsoga
goosegrass	witchgrass	pigweed

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

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



NOTICE TO USER: Plant tolerances to Pennant 5G 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 ornamental plants, it is impossible to test each for tolerance to Pennant 5G. Neither the manufacturer nor the seller has determined whether or not Pennant 5G can be used safely on ornamental plants not specified on this label. The professional user should determine if Pennant 5G 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.

Ornamentals (Container-, field-, and liner\*-grown) and Commercial Landscapes



\*Plants transplanted normally in rows in a nursery or similar area for further growth before transplanting to final growing place.

Apply Pennant 5G using a rotary spreader or similar type applicator 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.

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Broadcast Pennant 5G at rates shown below on established ornamentals, or to ornamentals at least 5 days after transplanting, but before grass and broadleaf weeds or yellow nutsedge emerge, or after existing weeds or nutsedge plants 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.

Suggested Rates of Pennant 5G		
Soil Texture	Lbs./A*	Lbs./1,000 sq. ft.
Coarse	40-60	0.9 - 1.4
Medium	40-60	0.9 - 1.4
Fine	60-80	1.4 - 1.8

\*Use higher rate for a given soil texture on high organic matter soils and where yellow nutsedge and/or a heavy infestation of weeds is expected. Use the lower rates on soils with low organic matter content, and where light infestations of grass weeds are expected. Pennant 5G is not recommended for use on peat and muck soils, on soils highly enriched with sawdust or other organic residues, or in potting mixtures containing high amounts of organic matter.

If band applications are used, calculate the amount of Pennant 5G needed as follows:

$$\frac{\text{Band width in inches}}{\text{Row Spacing in inches}} \times \frac{\text{Broadcast Rate}}{\text{Per Acre}} = \frac{\text{Band Rate}}{\text{Per Acre}}$$

Precautions: 1) To avoid plant injury, do not use Pennant 5G on seedbeds or on unrooted cuttings or before transplanting. 2) Do not apply Pennant 5G to ornamentals whose foliage is wet because the granules may adhere to the foliage and cause injury. Should granules adhere to the foliage, irrigate soon after application to remove the granules and reduce potential damage.

DO NOT USE IN GREENHOUSES OR OTHER ENCLOSED STRUCTURES.

Container-Grown Ornamentals

Use in aucuba (Aucuba spp.), holly (Ilex spp.), juniper (Juniperus spp.), and liriope (Liriope spp.) var. Silver Sunproof.

Field- and Liner-Grown Ornamentals

Use Pennant 5G in the following:

- African Lily (Agapanthus africanus)  
Ajuga (Ajuga reptans)  
\*Apple (Pyrus malus) including Red and Golden Delicious  
Arborvitae (Thuja spp.) including Globe  
Aucuba (Aucuba spp.)  
Azalea (Rhododendron spp.), including Flame, Hershey Red, Herbert, Purple Splendor,  
Bald Cypress (Taxodium distichum)  
Bamboo, (Nandina domestica), including heavenly  
Barberry (Berberis spp.), including Mentor, Warty, Wintergreen  
Bayberry (Myrica spp.)  
Birch, European Clump (Betula spp.)  
Boxwood (Buxus spp.)  
Camellia (Camellia spp.)  
Cherry (Prunus spp.) including Kwanson, Subhirtella Weeping, Schubert  
Cleyera (Ternstroemia gymanathera)  
Cotoneaster (Cotoneaster spp.) including Sargent, Vanguard  
\*Crabapple (Malus spp.) including Eleyi, Indian Magic, Perfusion, Radiant, Sargent, Snow Drift, Vanguard  
Crepe Myrtle (Lagerstroemia spp.), including Byars White  
Dogwood (Cornus spp.), including Chinese, Red Stem, White  
Escallonia (Escallonia fradesii)  
Euonymus (Euonymus spp.), including Bigleaf Winter-creeper, Purpleleaf Winter-creeper, Winged  
Fir, Douglas (Pseudotsuga menziesii)  
Fir, (Abies spp.), including Fraser, White  
Firethorn (Pyracantha spp.)  
Forsythia (Forsythia spp.) including Arnold's Dwarf, Golden Bells, and Spring Glory  
Fortnight Lily (Morea spp.)  
Ginkgo (Ginkgo biloba) including Autumn Gold  
Green ash (Fraxinus spp.)  
Hemlock (Tsuga spp.)  
Holly (Ilex spp.), including American, Boxleaf Japanese, Green Lustre Japanese, Nellie R. Stevens  
Honey Locust (Gleditsia triacanthos) including Shademaster  
Honeysuckle (Lonicera spp.) including Emerald Mound  
Hosta (Hosta lancifolia) including Variegated  
Hybrid Tea Rose (Rosa spp.)  
Hydrangea (Hydrangea spp.) including Annabel  
Ivy, English (Hedera spp.)  
Japanese Andromeda (Pieris spp.)  
Japanese Red Maple (Acer spp.)  
Jasmine (Jasminum spp.) including Asian  
Juniper (Juniperus spp.), including Andorra, Bar Harbor, Blue Pacific, Blue Rug, Chinese, Creeping, Sea Green, Shore, and Youngstown Andorra  
Kalmia (Kalmia latifolia)  
Leatherleaf Fern (Rumohra adiantiformis)  
Leucothoe (Leucothoe spp.)  
Lilac (Syringa spp.) including James McFarlane  
Liriope (Liriope spp.) including Monroe White, Silver, Sunproof, and Variegated  
Locust (Robinia spp.) including Shademaster, Sunburst  
Maple (Acer spp.) including Emerald Queen and Silver  
Maple whips (Acer spp.)  
Miniature Rose (Rosa spp.)

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- Mondo Grass (Ophiopogon japonicus)
- Mountain Laurel (Kalmia spp.)
- Ninebark (Physocarpus spp.) including Dwarf
- Oak (Quercus spp.) including Black, Red, White
- Osmanthus (Osmanthus spp.)
- Pachysandra (Pachysandra spp.)
- Pampas Grass (Cortaderia selloana)
- \*Peaches (Prunus spp.) including Belle of Georgia, Elberta
- \*Pear (Pyrus spp.) including Aristocrat, Bartlett, Bradford, Kieffer and Redspire Flowering
- Photinia (Photinia spp.)
- Pine (Pinus spp.) including Austrian, Black, Mugho, Scotch and White)
- Pittosporum (Pittosporum spp.) including Variegatum, and Wheeleri
- \*Plum (Prunus spp.) including Bruce, Methley, Newport Flowering, Purple, Santa Rosa, Thundercloud
- Podocarpus (Podocarpus spp.)
- Poplar (Populus spp.)
- Potentilla (Cinquefoil) (Potentilla spp.)
- Privet (Ligustrum spp.)
- Pyracantha (Pyracantha spp.)
- Rhododendron (Rhododendron spp.)
- Rosebay (Rhododendron spp.)
- Russian Olive (Elaeagnus angustifolia)
- Sand Cherry (Prunus spp.), including Purpleleaf
- Snowberry (Symphoricarpos spp.) including White
- Spicebush (Illicium spp.)
- Spirea (Spiraea spp.) including Froebelli and Vanhoutte
- Spruce (Picea spp.) including Black Hills, and Blue Colorado
- St. John's Wort (Hypericum spp.) including Kalm
- Stone Crop (Sedum spp.)
- Sweet Broom (Cytisus racemosus)
- Sweetgum (Liquidambar spp.) including American
- Tulip Tree (Liriodendron tulipifera)
- Viburnum (Viburnum spp.), including Downy Arrowwood
- Wax Myrtle (Myrica spp.)
- Weigela (Weigela spp.)
- Willow (Salix spp.) including Golden and Weeping
- Wisteria (Wisteria senensis)
- Yew (Taxus spp.), including Dwarf, Hicks, Japanese
- Yaupon, (Ilex spp.) including Dwarf

\*Do not apply to trees that will bear harvestable fruit within 12 months, or illegal residues may result.

Pennant 5G may also be applied before or after applications of other registered herbicides for ornamentals (e.g., Goal®, Princep®, Ronstar®, Surflan®, etc.) which control certain weed species not controlled by Pennant 5G. Refer to the respective product labels for weeds controlled.

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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 (919) 292-7100 day or night.

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin or inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling and wash contaminated clothing before reuse.

Statement of Practical Treatment


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

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If on skin: Wash with plenty of soap and water. Get medical attention. 

If inhaled: Remove victim to fresh air.

Environmental Hazards ✓ 

Cover or incorporate granules that are spilled during loading or are visible on soil surface in turn areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

Groundwater and Surface Water Advisory ✓

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

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

Goal® trademark of Rohm and Haas Company for oxyfluorfen

Pennant® trademark of CIBA-GEIGY Corporation for metolachlor

Princep® trademark of CIBA-GEIGY Corporation for simazine

Ronstar® trademark of Rhone-Poulenc for oxidiazon

Surflan® trademark of Elanco Products Company for oryzalin

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Agricultural Division  
CIBA-GEIGY Corporation  
Greensboro, NC 27419

CGA 82L2A - Printed Bag  
CGA 82L3A - PSL

December 11, 1985  
Revised June 15, 1987