PLEASE NOTE

This image contains more than one label approved for this product on this date.

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241-360 Pape 1219

An Emulsifiable Concentrate for Use as a Preemergent Weed Control in Noncropland Areas, Lawns and Other Turf Areas, Production and Established Landscape Ornamentals, Non-Bearing Fruit and Nut Trees, and Christmas Tree Plantations

ACTIVE INGREDIENT: pendimethalin, N-(1-ethylpropyl)-3,4-dimethyl-2, 6-dinitrobenzenamine	37.4%
INERT INGREDIENTS*:	<u>62.6%</u>
TOTAL	00.0%
(1 gallon contains 3.3 lbs. of pendimethalin)	

*Contains Petroleum Distillates

EPA Reg. No. 241-360

EPA Est. No.

KEEP OUT OF REACH OF CHILDREN CAUTION/!PRECAUCION!

PRECAUCION AL USUARIO

Si usted no entiende la etiqeta, busque a alguien para que se la explique a usted en detalle. If you do not understand the label, find someone to explain it to you in detail.

In case of an emergency endangering life or property involving this product, call collect, day or night, Area Code 973-683-3100.

FIRST AID

If in eyes:Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact
lenses, if present, after first 5 minutes, then continue rinsing. Call a poison control center
or doctor for treatment advice.If swallowed:Call a poison control center or doctor immediately for treatment advice. Have person sip a
glass of water if able to swallow. Do not induce vomiting unless told to by a poison control
center or doctor.For skin contact:Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20
minutes. Call a poison control center or doctor for treatment advice.

NOTE TO PHYSICIAN: Because of increased risk of chemical pneumonia or pulmonary edema caused by aspiration of the hydrocarbon solvent, vomiting should be induced only under professional supervision.

See next page for Additional Precautionary Statements.

AMERICAN CYANAMID COMPANY NORTH AMERICA AGRICULTURAL PRODUCTS DIVISION A C C E F T E D SPECIALTY PRODUCTS DEPARTMENT	PARSIPPANY, NJ 07054 [©] 1999			JU	IN	30	199	9	
	NORTH AMERICA AGRICULTURAL PRODUCTS DIVISION	A	С	С	E	P	T	E	D

IPA Reg. No.

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PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS

CAUTION!

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

Personal Protective Equipment (PPE):

NON-WPS USES:

Applicators and other handlers (except mixers/loaders) who handle this pesticide for any use NOT covered by the Worker Protection Standard (40 CFR Part 170) – in general, only agricultural-plant uses are covered by the WPS – must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as nitrile rubber (≥ 8 mils)
- Shoes plus socks

Mixers and Loaders must wear:

- Long-sleeved shirt and long pants, or coveralls
- Chemical-resistant gloves, such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or viton > 10 mils.
- Shoes plus socks

WPS USES:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category F on an EPA chemical resistance category selection chart. Applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR part 170) -- in general, agricultural-plant uses are covered -- must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or viton > 12 mils.
- Shoes plus socks

Follow manufacturer's instructions for cleaning and 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.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. DO NOT apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. DO NOT contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at time of herbicide application.

DO NOT apply this product through any type of irrigation system.

American Cyanamid Company does not recommend or authorize the use of this product in manufacturing, processing or preparing custom blends with other products for application to turf or ornamentals.

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.

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 (PPE), 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.

PPE required 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, is:

· Coveralls

· Chemical-resistant gloves, such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or viton ≥ 12 mils.

· Shoes plus socks

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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.

Do not enter or allow others to enter the treated area until sprays have dried.

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

STORAGE AND DISPOSAL

STORAGE: DO NOT STORE BELOW 40°F. Extended storage at temperatures below 40°F can result in the formation of crystals on the bottom of container. If crystallization does occur, store the container on its side at room temperature (70°F) and rock occasionally until crystals redissolve.

DO NOT contaminate water, food, or feed by storage or disposal.

PESTICIDE

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

CONTAINER

DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

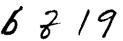
Observe all cautions and limitations in this label and the labels of products used in combination with PRE-M 3.3 EC turf herbicide. The use of PRE-M 3.3 EC turf herbicide not consistent with this label can result in injury to crops, animals, or persons. Keep containers closed to avoid spills and contamination.

DISCLAIMER

The label instructions 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 use or application of the product contrary to label instructions, all of which are beyond the control of American Cyanamid Company. All such risks shall be assumed by the user.

American Cyanamid Company warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risk referred to above.

Any damages arising from a breach of this warranty shall be limited to direct damages and shall not include consequential commercial damages such as loss of profits or values or any other special or indirect damages.



American Cyanamid Company makes no other express or implied warranty, including other express or implied warranty of FITNESS or of MERCHANTABILITY.

GENERAL INFORMATION

PRE-M 3.3 EC turf herbicide is recommended for use on plants intended for aesthetic purposes in landscaped grounds or being grown in fields, containers, or beds in production. PRE-M 3.3 EC turf herbicide can be used for preemergence weed control in interior plantscapes, or on ornamental gardens or parks, or on golf courses or lawns and landscape plantings.

PRE-M 3.3 EC turf herbicide is recommended for preemergence control of grasses and certain broadleaf weed species as they germinate on noncropland areas, in ornamentals, Christmas tree plantings, non-bearing fruit and nut trees, unimproved turf, and other vegetation control.

PRE-M 3.3 EC turf herbicide will not control established weeds. Therefore, areas to be treated should be free of established weeds at the time of treatment, or PRE-M 3.3 EC turf herbicide may be used in conjunction with herbicides registered for postemergence use in noncropland areas. Consult the labels of those herbicides for suggested treatments, rates to be used and precautions or restrictions for use in noncropland areas.

MIXING INSTRUCTIONS

- 1. Fill tank one-half to three-quarters full with clean water.
- 2. Add PRE-M 3.3 EC turf herbicide to the partially filled tank while agitating and then fill the remainder of the tank with water.
- 3. MAINTAIN CONTINUOUS AGITATION WHILE ADDING PRE-M 3.3 EC TURF HERBICIDE AND UNTIL SPRAYING IS COMPLETED. If the spray mixture is allowed to settle for any period of time, thorough agitation is essential to resuspend the mixture before spraying is resumed. Continue agitation while spraying.
- 4. If PRE-M 3.3 EC turf herbicide is to be used in tank mixtures with other registered herbicides, then follow directions on the labels of those products which recommend tank mixing.

Backpack Sprayer: Begin with a clean spray tank. Fill the spray tank ½ full with clean water and add the required amount of PRE-M 3.3 EC turf herbicide to the sprayer. Cap sprayer and agitate to ensure mixing. Uncap sprayer and finish filling tank to desired level. Cap sprayer and agitate once again. During application it is desirable to agitate the mixture on occasion to ensure mixing. If the spray mixture is allowed to settle for any period of time, thorough agitation is essential before spraying is resumed.

Liquid Fertilizers: Prior to mixing, small quantities should always be tested using a simple jar test. Add the required amount of PRE-M 3.3 EC turf herbicide to half filled spray tank while agitating then add the fertilizer product. Complete filling spray tank to desired level.

Dry Bulk Fertilizers: PRE-M 3.3 EC turf herbicide may be impregnated on dry bulk fertilizers. When applied as directed, PRE-M 3.3 EC turf herbicide /Dry Bulk Fertilizer mixtures provide weed control equal to that provided by the same rates of PRE-M 3.3 EC turf herbicide applied in water.

SPRAYING INSTRUCTIONS

Uniformly apply with properly calibrated ground equipment in sufficient water per acre to uniformly treat the area with a spray pressure of 25 to 50 psi. Maintain continuous agitation during spraying with good mechanical

or bypass agitation. Avoid overlaps that will increase rates above those recommended. Avoid application when winds may cause drift.

Avoid unintentional contact of spray solution with driveways, stone, wood, or other porous surfaces. Rinse immediately to avoid staining.

NONCROPLAND WEED CONTROL

PRE-M 3.3 EC turf herbicide is recommended for preemergence control of most annual grasses and certain broadleaf weeds as they germinate on noncropland areas such as railroad, utility, highway, and pipeline rights-of-way; highway guardrails, delineators, and sign posts; utility substations; petroleum tank farms; pumping installations; fence rows; storage areas; windbreaks and shelterbelts, and other similar areas.

For postemergence control of weeds, tank-mix combinations of PRE-M 3.3 EC turf herbicide plus ARSENAL³ herbicide are recommended. **DO NOT** tank mix with ARSENAL in California. Recommended rates for the tank-mix compounds should be determined from the product labels of both PRE-M 3.3 EC turf herbicide and ARSENAL prior to use. See Table on WEED SPECIES CONTROLLED for rates.

PRODUCTION AND ESTABLISHED LANDSCAPE ORNAMENTALS

PRE-M 3.3 EC turf herbicide can be used in and around field, liner or container nurseries, established ornamentals or gardens, or in general grounds maintenance, or parks, around military or other insitutions, or commercial establishments, or cemeteries, and other similar areas.

PRE-M 3.3 EC turf herbicide is recommended for use on the following established ornamentals and ground covers planted in noncropland areas such as highway rights-of-way, utility substations, mulch beds, parking areas, statuary or monuments, or similar areas.

ORNAMENTAL PRECAUTIONS

Apply PRE-M 3.3 EC turf herbicide to established plantings. DELAY applying PRE-M 3.3 EC turf herbicide to seedbeds, transplant beds, or bareroot liners placed in containers until plants have become well rooted (2-4 weeks). Care must be taken that soil or planting mixes have settled firmly following transplanting and that there are no cracks that would allow direct contact of PRE-M 3.3 EC turf herbicide with roots. Directed sprays where soil and media surfaces are uniformly covered will result in best weed control and ornamental tolerance. Plant only those desirable plant species listed on this label into soil treated the previous season with PRE-M 3.3 EC turf herbicide or injury may occur.

PRE-M 3.3 EC turf herbicide sprays can be safely applied over-the-top of those plants listed below.

DO NOT APPLY PRE-M 3.3 EC turf herbicide in greenhouses, shadehouses or other enclosed structures.

ORNAMENTAL TANK MIXES

Emerged weeds in ornamentals can be controlled using tank mixes containing Roundup PRO⁴, Finale¹, Ornemec², Gallery⁵, Princep⁸, and other similar products. Do not apply sprays containing Roundup PRO or Finale over the top of ornamental plants.

Before tank mixing a simple jar test is recommended to insure compatibility of herbicides.

Refer to manufacturers' labels for specific use directions, precautions, and limitations before tank mixing with PRE-M 3.3 EC turf herbicide and follow those that are most restrictive.

RECOMMENDED SPECIES

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PRE-M 3.3 EC turf herbicide sprays are safe around and over the top of the established plants listed below. However, not all varieties or strains of the plants listed have been tested. Unintentional consequences such as crop injury may result because of certain environmental or growing conditions, manner of use or application. Therefore, before treating a large number of plants, spray a few plants and observe for plant damage prior to full scale application.

Refer to Table on WEED SPECIES CONTROLLED for rates.

TREES

<u>Common Name</u>	Scientific Name
Alder, European black	Alnus glutinosa
Apple	Malus spp.
Arborvitae, American	Thuja occidentalis
Arbutus	Arbutus spp.
Ash, Red	Fraxinus pennsylvanica
Ash, White	Fraxinus americana
Aspen, Bigtooth	Populus grandidentata
Aspen, Quaking	Populus tremuloides
Basswood	Tilia spp.
Birch, European Weeping	Betula pendula
Birch, River	Betula nigra
Buckeye, Red	Aesculus pavia
Cedar, White	Thuja occidentalis
Chamaecyparis, Boulevard	Chamaecyparis pisifera
Cherry, Black	Prunus serotina
Cherry, Choke	Prunus virginiana
Cherry, Kwanzan	Prunus serrulata
Cherry, Nanking	Prunus tomentosa
Cottonwood	Populus deltoides
Crabapple	Malus spp.
Crepe myrtle	Lagerstroemia indica
Cryptomeria, Japanese Cedar	Cryptomeria japonica
Cypress, Bald	Taxodium distichum
Cypress, Leyland	Cupressocyparis leylandii
Dogwood, Flowering	Cornus florida
Dogwood, Korean	Cornus kousa
Dogwood, Silky	Cornus amomum
Dogwood, Shrub	Cornus spp.
Elm	Ulmus japonica
Fir, Balsam	Abies balsamae
Fir, Douglas	Pseudotsuga menziesii
Fir, Fraser	Abies fraseri
Fir, White	Abies concolor
Franklinia	Franklinia spp.
Ginkgo	Ginkgo biloba
Gum, Black	Nyssa sylvatica
Gum, Sour	Nyssa sylvatica Vikum mana iCaliana
Haw, Black	Viburnum prunifolium
Hawthorn	Crataegus spp.

Hemlock, Canada Hemlock, Eastern Holly, American Honeylocust Lilac, Common Lilac, Japanese Tree Linden Magnolia, Saucer Magnolia, Southern Magnolia, Star Maidenhair Tree Maple, Norway Maple, Japanese Maple, Red Maple, Sugar Nannyberry, Rusty Oak, Chinquapin Oak, Live Oak, Pin Oak, Red Oak, Swamp chestnut Oak, Water Oak, White Oak, Willow Olive Palm, Date Palm, Fan Palm, Pindo Palm, Washington Peach Pear, Bradford Pecan Pine, Austrian Pine, Italian Stone Pine, Loblolly Pine, Monterey Pine, Red Pine, Scotch Pine, Slash Pine, Virginia Pine, White Plum, Purple Leaf Poplar, Black Redcedar, Eastern Redcedar, Western Red Ironbark Redwood, Dawn Sequoia, Giant Serviceberry Sourwood Spruce, Colorado Blue Spruce, Dwarf Alberta Spruce, Norway Spruce, White

Tsuga canudensis Tsuga canadensis Ilex opaca Gleditsia triacanthos Syringa vulgaris Syringa reticulata Tilia spp. Magnolia soulangiana Magnolia grandiflora Magnolia stellata Ginkgo biloba Acer platanoides Acer palmatum Acer rubrum Acer saccharum Viburnum rufidulum Quercus muehlenbergii Quercus virginiana Quercus palustris Quercus rubra Quercus michauxii Quercus nigra Quercus alba Quercus phellos Olea europaea Phoenix spp. Washingtonia spp. Butia spp. Washingtonia spp. Prunus persica Pyrus calleryana 'Bradford' Carya illinoensis Pinus nigra Pinus pinea Pinus taeda Pinus radiata Pinus resinosa Pinus sylvestris Pinus elliottii Pinus virginiana Pinus strobus Prunus cerasifera Populus nigra Juniperus virginiana Thuja plicata Eucalyptus sideroxylon 'Rosea' Metasequoia glyptostroboides Sequoiadendron giganteum Amelanchier laevis Oxydendrum arboreum Picea pungens Picea glauca 'albertiana' Picea abies Picea glauca

Sweetgum Sycamore Trachycarpus Tulip tree Walnut, Black Willow, Weeping Yellowwood

SHRUBS

Common Name

Abelia, Glossy Aucuba, Gold Azalea Bamboo, Heavenly Barberry Barberry, Japanese Blue Indigo Bush Bottlebrush, Lemon Boxwood, Common Boxwood, Japanese Camellia Cape jasmine Cordyline Correa Cotoneaster Cotoneaster, Bearberry Cotoneaster, Rock Cypress, Italian Cypress, Leyland Deutzia, Slender Dogwood, Red Twig Elaeagnus Escallonia Euonymus Euonymus, Golden Euonymus, Winged Firethorn Forsythia, Border Fragrant Olive Fuschia, California Gardenia Hawthorne, Indian Hibiscus Holly, Chinese Holly, Japanese Holly, Fosters Holly, Savannah Holly, Yaupon Honeysuckle, Bush Juniper

Liquidambar styraciflua Platanus occidentalis Trachycarpus spp. Liriodendron tulipifera Juglans nigra Salix babylonica Cladrastis lutea

Scientific Name

Abelia grandiflora Aucuba japonica Rhododendron spp. Nandina domestica Berberis gladwynensis Berberis thunbergii Dalea gregii Callistemon citrinus Buxus sempervirens Buxus microphylla Camellia japonica Gardenia jasminoides *Cordyline* spp. Correa spp. Cotoneaster apiculatus Cotoneaster dammeri Cotoneaster horizontalis Cupressus sempervirens Cupressocyparis leylandii Deutzia gracilis Cornus sericea Elaeagnus ebbingei Escallonia fradesii Euonymus fortunei Euonymus japonica Euonymus alata Pyracantha coccinea Forsythia intermedia Osmanthus fragrans Zauschineria californica Gardenia jasminoides Raphiolepis indica Hibiscus syriacus Ilex cornuta Ilex crenata Ilex attenuata 'Fosteri' Ilex attenuata Ilex vomitoria Diervilla lonicera Juniperus spp.

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Juniper, Chinese Juniper, Shore Juniper, Trailing Laurel, Cherry Laurel, Mountain Laurel, Otto Luyken Laurel, Schipka Laurustinus Lavender, English Leucothoe Leucothoe, Coast Lilac. Cut-leaf Lilv-of-the-Nile Mahonia Mock Orange Myrtle, Compact Myrtle, Wax Nandina Oleander Oregon Grape Osmanthus Palm, European Fan Palm, Mediterranean Fan Phlox, Prickly Photinia, Fraser Pieris, Japanese Pine, Mugo Plum, Natal Privet, California Privet, Glossy Privet, Variegated Privet, Waxleaf Pyracantha Quince, Flowering Ranger, Texas Redroot Rhododendron Robira Spice Plant Spiraea Spiraea, Anthony Waterer Spiraea, Japanese Sweet Bay Trumpet Bush Verbena, Lemon Viburnum Vitex Weigela Wild Lilac Xylosma Yellowbells Yew Yew, Japanese Yew, Southern

Juniperus cninensis v. pfitzer Juniperus conferta Juniperus horizontalis Prunus laurocerasus Kalmia latifolia Prunus laurocerasus Prunus schipkanensis Viburnum tinus Lavandula angustifolia Leucothoe fontanesiana Leucothoe axillaris Syringa laciniata Agapanthus africanus Mahonia aquifolium Pittosporum tobira Myrtus communis Myrica cerifera Nandina domestica Nerium oleander Mahonia aquifolium Osmanthus fragrans Chamaerops humilis Chamaerops spp. Leptodactylon californicum Photinia X Fraseri Pieris japonica Pinus mugo Carissa grandiflora Ligustrum ovalifolium Ligustrum lucidum Ligustrum sinensis Ligustrum japonicum Pyracantha coccinea Chaenomeles japonica Leucophyllum frutescens Ceanothus spp. Rhododendron spp. Pittosporum tobiri Illicium parviflorum Spiraea vanhouttei Spiraea X bumalda Spirea japonica Laurus nobilis Tecoma stans Aloysia triphylla Viburnum suspensum Vitex spp. Weigela florida Ceanothus spp. Xylosma congestum Tecoma stans Taxus media Taxus cuspidata Podocarpus macrophyllus

Yucca, Adam's Yucca, Weeping Yucca filamentosa Yucca pendula

GROUND COVERS

Common Name

Ajuga Capeweed Cinquefoil, Spring Daisy, Trailing African Gazania Iceplant, Large Leaf Ivy, English Ivy, Geranium Jasmine, Asiatic Jasmine, Primrose Mondograss Myoporum Pachysandra Potentilla Rose-Of-Sharon Wintercreeper

PERENNIALS

Common Name

Bleeding Heart Calla lily Canna, common garden Chincherinchee Crinum Lily Fern, Asparagus Fern, Leatherleaf Freesia Heather, Dwarf Hosta Lily Liriope, Creeping Liriope, Variegated Montbretia Orchid, Peacock Peony, Chinese Wisteria Zephyr Lily

ORNAMENTAL GRASSES

Scientific Name

Ajuga reptans Arctotheca calendula Potentilla verna Osteospermum fruticosum Gazania splendens Carpobrotus edulis Hedera helix Pelargonium peltatum Trachelospermum asiaticum Jasminum mesnyi **Ophiopogon** japonica Myoporum parviflolium Pachysandra terminalis Potentilla fruticosa Hypericum calycinum Euonymous fortunei

Scientific Name

Dicentra spectabilis Zantedeschia aethiopica Canna generalis 'Lucifer' Ornithogalum thyrsoides Crinum spp. Asparagus officinalis Rumohra adiantiformis Freesia x hybrida Calluna vulgaris Hosta spp. Lillium spp. Liriope spicata Liriope muscari Crocosmia crocosmiiflora Acidanthera bicolor Paeonia lactiflora Wisteria spp. Zephyranthes spp.

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Common Name 🦻	Scientificame
Beach Grass	Ammophila breviligulata
Fescue, Blue	Festuca ovina
Fescue, Sheep	Festuca ovina
Fountain Grass	Pennisetum setaceum
Pampas Grass	Cortaderia selloana
Reed Canary Grass	Phalaris arundinacea
Reed, Giant	Arundo spp.
Ribbon Grass	Phalaris arundinacea
Tufted Hair Grass	Deschampsia caespitosa

PRE-M 3.3 EC turf herbicide may be used on plant species not listed on this label. The suitability for such uses should be determined by treating a small number of such plants at the recommended rate. Treated plants should be evaluated 1-2 months following treatment for possible injury. THE USER ASSUMES RESPONSIBILITY FOR ANY CROP DAMAGE OR OTHER LIABILITY. Do not treat plants grown for food or feed. Do not use treated plants for food or feed.

WEED CONTROL IN CHRISTMAS TREE PLANTATIONS

PRE-M 3.3 EC turf herbicide is recommended for preemergence control of the weed species listed on this label as they germinate in areas planted with the following Christmas trees:

- * Austrian Pine
 * Balsam Fir Colorado Blue Spruce Douglas Fir
 * Scotch Pine
- * Virginia Pine White Fir
- * White Spruce

Pinus nigra Abies balsamae Picea pungens Pseudotsuga menziesii Pinus sylvestris Pinus virginiana Abies concolor Picea glauca

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*Do not use in California.

PRE-M 3.3 EC turf herbicide can be applied directly over the top of established Christmas trees. DELAY applying PRE-M 3.3 EC turf herbicide to seedbeds, transplant beds, or bareroot liners until plants have become well rooted.

PRE-M 3.3 EC turf herbicide will not control established weeds. Therefore, areas to be treated should be free of established weeds at the time of treatment, or PRE-M 3.3 EC turf herbicide may be used in conjunction with herbicides registered for postemergence use in Christmas trees. Consult the labels of those nerbicides for suggested treatments, rates to be used and precautions or restrictions for use in Christmas trees.

WEED CONTROL IN NON-BEARING FRUIT AND NUT CROPS AND VINEYARDS

PRE-M 3.3 EC turf herbicide may be applied for preemergence control of most annual grasses and certain broadleaf weeds on the following non-bearing crops:

Almond	Olive
Apple	Peach
Apricot	Pear
Cherry	Pecan
Citrus	Pistachio

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Fig Grape Nectarine Plum Prune Walnut, English

Refer to Table on WEED SPECIES CONTROLLED for rates.

Apply the spray directly to the ground below the trees or vines. Care must be taken that soil or planting mixes have settled firmly following transplanting and that there are no cracks that would allow direct contact of PRE-M 3.3 EC turf herbicide and roots. Directed sprays where soil and media surfaces are uniformly covered will result in best weed control and plant tolerance. For newly transplanted and one year old grapevines, apply only when they are dormant. Do not apply if buds have started to swell. PRE-M 3.3 EC turf herbicide may be used where the roots of a fruit, vine, nut, or ornamental plant encroach into a treatable area.

WEED SPECIES CONTROLLED

For preemergence control of the weed species listed, apply PRE-M 3.3 EC turf herbicide at the following rates:

Length of Control	PRE-M 3.3 EC turf herbicide	Ounces required to
		Treat 1000 sq. ft
Short Term Control (2-4 months)	2.4 Quarts/Acre	1.8 oz.
Long Term Control (6-8 months)	4.8 Quarts/Acre	3.6 oz.

PRE-M 3.3 EC turf herbicide will not control established weeds.

The efficacy of PRE-M 3.3 EC turf herbicide will be improved if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. If PRE-M 3.3 EC turf herbicide is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

The following grass and broadleaf weeds are controlled by preemergence treatments of PRE-M 3.3 EC turf herbicide at the rates recommended:

GRASSES CONTROLLED

Common Name	Scientific Name
Barnyardgrass	Echinochloa crus-galli
Bluegrass, Annual	Poa annua
Crabgrass	Digitaria spp.
Crowfootgrass	Dactyloctenium aegyptium
Foxtail, Giant	Setaria faberi
Foxtail, Green	Setaria viridis
Foxtail, Yellow	Setaria lutescens
Goosegrass	Eleusine indica
Itchgrass	Rottboellia exaltata
Johnsongrass (from seed)	Sorghum halepense
Junglerice	Echinochloa colonum
Lovegrass	Eragrostis spp.
Panicum, Browntop	Panicum fasciculatum

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Panicum, Fall Panicum, Texas Sandbur, Field Signalgrass Sprangletop, Mexican Sprangletop, Red Witchgrass Woolly Cupgrass t anicum dichotomiflorum Panicum texanum Cenchrus incertus Brachiaria platyphylla Leptochloa uninervia Leptochloa filiformis Panicum capillare Eriochloa villosa 15 2 19

BROADLEAF WEEDS CONTROLLED

Common Name

Burweed, Lawn Carpetweed Chickweed, Common Chickweed, Mouseear Clover, Hop Cudweed Eveningprimrose Fiddleneck Filaree Henbit Knotweed (prostrate) Kochia Lambsquarters Pigweed Puncturevine Purslane Pusley, Florida Rocket, London Sheperdspurse Smartweed, Pennsylvania Speedwell, Corn Spurge, Annual Spurge, Prostrate Woodsorrel, Yellow Velvetleaf (Buttonweed)

Scientific Name

Soliva ptersoperma Mollugo verticillata Stellaria media Cerastium vulgatum Trifolium procumbens Gnaphalium spp. Oenothera biennis Amsinckia intermedia Erodium spp. Lamium amplexicaule Polygonum aviculare Kochia scoparia Chenopodium album Amaranthus spp. Tribulus terrestris Portulaca oleracea Richardia scabra Sisymbrium irio Capsella bursa-pastoris Polygonum pensylvanicum Veronica arvensis Euphorbia spp. Euphorbia humistrata Oxalis stricta Abutilon theophrasti

WEED CONTROL IN LAWNS AND TURF

PRE-M 3.3 EC turf herbicide provides preemergence control of most annual grasses and certain broadleaf weeds as they germinate in any turfgrass site (lawns. sod, turf areas). Examples of such sites include, but are not limited to: grounds or lawns around residential and commercial establishments, multifamily dwellings, military and other institutions, parks, airports, roadsides, schools, picnic grounds, athletic fields or jogging paths, areas around houses of worship, cemeteries; golf courses; prairiegrass areas; and sod farms.

<u>16</u> <u>3</u> <u>19</u> <u>Turfgrass Types</u>: PRE-M 3.3 EC turf herbicide should only be applied to well established lawns and turf. PRE-M 3.3 EC turf herbicide can be used on the following turfgrasses: Bahiagrass, Bermudagrass, Centipededgrass, Fine Fescue, Kentucky Bluegrass, Perennial Ryegrass, St. Augustinegrass, Tall Fescue, Zoysiagrass.

GENERAL TURF INFORMATION

Use only on well-established turfgrass with a dense and uniform stand.

Do not use on greens or injury may occur.

PRE-M 3.3 EC turf herbicide treatments will not control established weeds.

Applications must be made prior to germination of weeds.

Allow at least 2 months between applications except where indicated under RATE AND APPLICATION CHART.

MIXING AND APPLICATION INSTRUCTIONS

Add PRE-M 3.3 EC turf herbicide slowly to partially filled tank (1/2 to ³/₄ full) of water while agitating and then fill the remainder of the tank with water. MAINTAIN CONTINUOUS AGITATION WHILE ADDING PRE-M 3.3 EC turf herbicide AND UNTIL SPRAYING IS COMPLETED. If the spray mixture is allowed to settle for any period of time, thorough agitation is essential to resuspend the mixture before spraying is resumed. Continue agitation while spraying as needed.

Apply with properly calibrated equipment in sufficient water per acre to provide uniform spray distribution. Low pressure (25-50 psi) sprayers are recommended. Avoid application when winds may cause drift.

COMPATIBILITY

PRE-M 3.3 EC turf herbicide is compatible with most commonly used herbicides. When PRE-M 3.3 EC turf herbicide is used in tank mixture with another herbicide, refer to each label for rates, methods of application, proper timing, weeds controlled, limitations, and precautions. <u>Always use</u> in accordance with the more restrictive label limitations and precautions. When tank mixing be sure to add PRE-M 3.3 EC turf herbicide to the partially filled tank first, mix thoroughly, and then add combination products to the mixture. DO NOT apply tank mix combinations unless previous experience indicates the mixture is effective and will not result in application problems or plant injury. DO NOT attempt to mix PRE-M 3.3 EC turf herbicide directly with liquid fertilizer. Premix one part of PRE-M 3.3 EC turf herbicide with two parts water and add this diluted mixture slowly into the tank while agitating.

PRECAUTIONS ON TURF

Not for use on bentgrass or Poa annua (putting greens and tees) or on dichondra, where these are desired species

This product may cause yellowing and thinning of cool season grasses in winter overseeded turf.

Delay seeding by 3 months and sprigging by 5 months after application. Prior to seeding or sprigging, the soil surface should be disturbed or worked to dilute any remaining chemical residue.

On newly planted areas, wait until the grass has been mowed at least 4 times and has filled in before applying product.

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On turf that has been severely thinned due to winter damage, excessive soil moisture, low temperature (below 40°F), scalping, insects, disease, etc., wait until turf has filled in and rooting of stolons is complete before applying.

This product may stain, thus avoid contact with areas such as sidewalks, driveways, etc. If contact with the spray mixture occurs, promptly rinse with water.

PRE-M 3.3 EC turf herbicide treatments are most effective in controlling weeds when adequate rainfall or overhead irrigation is received within 7 days after irrigation.

Weeds Species Controlled: When applied as directed, PRE-M 3.3 EC turf herbicide will control the following weed species:

GRASSES CONTROLLED

Common Name

Annual bluegrass Barnyardgrass Crabgrass Fall panicum Foxtail Goosegrass

Scientific Name

Poa annua Echinochloa crus-galli Digitaria spp. Panicum dichotomiflorum Setaria spp. Eleusine indica

BROADLEAF WEEDS CONTROLLED

Common Name

Common chickweed Cudweed Hop clover Henbit Knotweed Mouseear chickweed Prostrate spurge Purslane Oxalis Evening primrose

Scientific Name

Stellaria media Gnaphalium spp. Trifolium procumbens Lamium amplexicaule Polygonum avicularc Cerastium vulgatum Euphorbia supina Portulaca oleracea Oxalis spp. Oenothera biennis

RATE AND APPLICATION CHART

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Turf <u>Species</u>	Weeds Controlled	Rates of PRE-M 3.3 EC turf herbicide	Comments
Northern Grasses: Fine fescue Kentucky bluegrass Perennial ryegrass Tall fescue	Barnyardgrass Crabgrass Fall panicum Foxtail Hop clover Prostrate spurge Yellow woodsorrel Cudweed	3.6 to 4.8 pt per acre or 1.3 to 1.8 oz per 1,000 sq ft	Apply in Spring before weeds germinate. Repeat applications if necessary in 5 - 8 weeks at 2.5 - 3.6 pt per acre or 1 to 1.3 oz per 1,000 sq ft.
	Goosegrass Evening primrose	7.2 pt per acre or 2.6 oz per 1,000 sq ft	Apply in Spring before weeds germinate. Repeat application if necessary in 5 - 8 weeks at 2.5 - 3.6 pt per acre or 1 to 1.3 oz per 1,000 sq ft.
	Annual bluegrass Common chickweed Mouseear chickweed	3.6 pt to 4.8 pt per acre or 1.3 to 1.8 oz per 1,000 sq ft	Apply in late Summer to early Fall before weeds germinate.
Southern Grasses: Bahia Bermudagrass Centipedegrass St. Augustinegrass Tall fescue Zoysiagrass	Barnyardgrass Crabgrass Fall panicum Foxtail Prostrate spurge Yellow woodsorrel Cudweed	4.2 to 4.8 pt per acre or 1.6 to 1.8 oz per 1,000 sq ft	Apply in Spring before weeds germinate. Repeat application if necessary in 5 - 8 weeks using 2.5 - 3.6 pt per acre or 1 to 1 3 oz 1,000 sq ft.
	Goosegrass Hop clover Evening primrose	6.4 to 7.2 pt per acre or 2.4 to 2.6 oz per 1,000 sq ft.	Apply in Spring before weeds germinate An additional application of 3.6 pt per acre or 1.3 oz

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Make a second application at 3.6 pt per acre or 1.3 oz per 1,000 sq ft at 5 - 8 weeks. per 1,000 sq ft. may be made for extended goosegrass control 8 weeks after the second application.

Henbit3.6 to 4.8 ptApply in late SummerAnnual bluegrassper acre or 1.3to early FallCommon chickweedto 1.8 oz perbefore weedsMouseear chickweed1,000 sq ftgerminate.

INDUSTRIAL (UNIMPROVED) TURF

Industrial, or unimproved turf areas often have a different spectrum of weeds to be controlled than those found in fine turf as described in this leaflet. PRE-M 3.3 EC turf herbicide will control annual grasses and broadleaf weeds mentioned in that section of this label as well as the following weeds that might germinate in established grasses in rights-of-way, roadsides, construction sites, parks, substations, lots, or similar areas:

Crowfootgrass, Itchgrass, Johnsongrass (from seed), Junglerice, Lovegrass, Browntop Panicum, Texas Panicum, Field Sandbur, Signalgrass, Mexican Sprangletop, Red Sprangletop, Witchgrass, Woolly Cupgrass, Carpetweed, Fiddleneck, Filaree, Kochia, Lambsquarters, Pigweed, Puncturevine, Florida Pusley, London Rocket, Shepherdspurse, Pennsylvania Smartweed, Annual Spurge, and Velvetleaf.

Apply before weeds germinate. A postemergence herbicide such as 2,4-D, MSMA, or similar products may be tank mixed to control established weeds. Apply according to label instructions for the respective products and follow the most restrictive wording.

TOTAL VEGETATION CONTROL

PRE-M 3.3 EC turf herbicide may be tank mixed with ARSENAL⁶, PLATEAU⁶, Roundup PRO, Karmex⁷, Finale, Oust⁷, diuron, or other products to provide bare ground, or total vegetation control. PRE-M 3.3 EC turf herbicide can be used to provide greater plant selectivity in areas where such action may be desired. Such sites might have roots of landscape vegetation, ornamentals, or desirable trees encroaching into the treated zone. Refer to tank mix partner labels regarding effects on desirable plants. DO NOT tank mix with ARSENAL in California.

Applications may be made to existing weeds controlled by the partner herbicide. Recommended rates should be determined from the product labels prior to use. Follow the most restrictive label instructions.

For Kochia: Combinations of PRE-M 3.3 EC turf herbicide with ARSENAL or diuron are recommended if control has been a problem for other herbicides. For rates refer to RATE AND APPLICATION CHART.

¹Trademark of AgrEvo

²Trademark of PBI Gordon Corp.

³Registered Trademark of American Cyanamid Company

⁴Registered Trademark of Monsanto Company

⁵Trademark of Dow AgroSciences

⁶Registered Trademark of American Cyanamid Company

⁷Trademark of E. I. DuPont de Nemours and Company

⁸Trademark of Novartis Crop Protection, Inc.

NEXT

LABEL

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6/30/1999

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PRE-M® 3.3 EC TURF HERBICIDE SUPPLEMENTAL LABELING

EPA REG. NO. 241-360

An Emulsifiable Concentrate for Uses as a Preemergent Weed Control in Noncropland Areas, Lawns and Other Turf Areas, Production and Established Landscape Ornamentals, Non-Bearing Fruit and Nut trees, and Christmas Tree Plantations

REVISED PERSONAL PROTECTIVE EQUIPMENT (PPE)

OBSERVE ALL PRECAUTIONARY STATEMENTS, MIXING AND APPLICATION INSTRUCTIONS ON THE PRE-M 3.3 EC HERBICIDE LABEL

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS

CAUTION!

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

Personal Protective Equipment (PPE):

NON-WPS USES:

Applicators and other handlers (except mixers/loaders) who handle this pesticide for any use NOT covered by the Worker Protection Standard (40 CFR Part 170) – in general, only agricultural-plant uses are covered by the WPS – must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as nitrile rubber ≥ 8 mils
- Shoes plus socks

Mixers and Loaders must wear:

- Shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or viton ≥ 10 mils.
- Shoes plus socks

® Registered Trademark of LESCO, Inc.

ACCEPTED
JUN 30 1999
Under the Federal Insecticide, Fungicide, and Rodenticide Let, as amended, for the pesticide registered under EPA Reg. No. $241-360$

WPS USES:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category F on an EPA chemical resistance category selection chart. Applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR part 170) -- in general, agricultural-plant uses are covered -- must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or viton ≥ 12 mils.
- Shoes plus socks

Follow manufacturer's instructions for cleaning and 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.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. DO NOT apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. DO NOT contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at time of herbicide application.

DO NOT apply this product through any type of irrigation system.

American Cyanamid Company does not recommend or authorize the use of this product in manufacturing, processing or preparing custom blends with other products for application to turf or ornamentals.

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.

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 (PPE), 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.

PPE required 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, is:

 \cdot Coveralls

• Chemical-resistant gloves, such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or viton ≥ 12 mils.

· 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.

Do not enter or allow others to enter the treated area until sprays have dried.

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

GENERAL INFORMATION

PRE-M 3.3 EC turf herbicide is recommended for use on plants intended for aesthetic purposes in landscaped grounds or being grown in fields, containers, or beds in production. PRE-M 3.3 EC turf herbicide can be used for preemergence weed control in interior plantscapes, or on ornamental gardens or parks, or on golf courses or lawns and landscape plantings.

PRE-M 3.3 EC turf herbicide is recommended for preemergence control of grasses and certain broadleaf weed species as they germinate on noncropland areas, in ornamentals, Christmas tree plantings, non-bearing fruit and nut trees, unimproved turf, and other vegetation control.

PRE-M 3.3 EC turf herbicide will not control established weeds. Therefore, areas to be treated should be free of established weeds at the time of treatment, or PRE-M 3.3 EC turf herbicide may be used in conjunction with herbicides registered for postemergence use in noncropland areas. Consult the labels of those herbicides for suggested treatments, rates to be used and precautions or restrictions for use in noncropland areas.

MIXING INSTRUCTIONS

- 1. Fill tank one-half to three-quarters full with clean water.
- 2. Add PRE-M 3.3 EC turf herbicide to the partially filled tank while agitating and then fill the remainder of the tank with water.
- 3. MAINTAIN CONTINUOUS AGITATION WHILE ADDING PRE-M 3.3 EC TURF HERBICIDE AND UNTIL SPRAYING IS COMPLETED. If the spray mixture is allowed to settle for any period of time, thorough agitation is essential to resuspend the mixture before spraying is resumed. Continue agitation while spraying.
- 4. If PRE-M 3.3 EC turf herbicide is to be used in tank mixtures with other registered herbicides, then follow directions on the labels of those products which recommend tank mixing.

Backpack Sprayer: Begin with a clean spray tank. Fill the spray tank $\frac{1}{2}$ full with clean water and add the required amount of PRE-M 3.3 EC turf herbicide to the sprayer. Cap sprayer and agitate to ensure mixing. Uncap sprayer and finish filling tank to desired level. Cap sprayer and agitate once again. During application it is desirable to agitate the mixture on occasion to ensure mixing. If the spray mixture is allowed to settle for any period of time, thorough agitation is essential before spraying is resumed.

Liquid Fertilizers: Prior to mixing, small quantities should always be tested using a simple jar test. Add the required amount of PRE-M 3.3 EC turf herbicide to half filled spray tank while agitating then add the fertilizer product. Complete filling spray tank to desired level.

Dry Bulk Fertilizers: PRE-M 3.3 EC turf herbicide may be impregnated on dry bulk fertilizers. When applied as directed, PRE-M 3.3 EC turf herbicide /Dry Bulk Fertilizer mixtures provide weed control equal to that provided by the same rates of PRE-M 3.3 EC turf herbicide applied in water.

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SPRAYING INSTRUCTIONS

Uniformly apply with properly calibrated ground equipment in sufficient water per acre to uniformly treat the area with a spray pressure of 25 to 50 psi. Maintain continuous agitation during spraying with good mechanical or bypass agitation. Avoid overlaps that will increase rates above those recommended. Avoid application when winds may cause drift.

Avoid unintentional contact of spray solution with driveways, stone, wood, or other porous surfaces. Rinse immediately to avoid staining.

PRODUCTION AND ESTABLISHED LANDSCAPE ORNAMENTALS

PRE-M 3.3 EC turf herbicide can be used in and around field, liner or container nurseries, established ornamentals or gardens, or in general grounds maintenance, or parks, around military or other insitutions, or commercial establishments, or cemeteries, and other similar areas.

PRE-M 3.3 EC turf herbicide is recommended for use on the following established ornamentals and ground covers planted in noncropland areas such as highway rights-of-way, utility substations, mulch beds, parking areas, statuary or monuments, or similar areas.

ORNAMENTAL PRECAUTIONS

Apply PRE-M 3.3 EC turf herbicide to established plantings. DELAY applying PRE-M 3.3 EC turf herbicide to seedbeds, transplant beds, or bareroot liners placed in containers until plants have become well rooted (2-4 weeks). Care must be taken that soil or planting mixes have settled firmly following transplanting and that there are no cracks that would allow direct contact of PRE-M 3.3 EC turf herbicide with roots. Directed sprays where soil and media surfaces are uniformly covered will result in best weed control and ornamental tolerance. Plant only those desirable plant species listed on this label into soil treated the previous season with PRE-M 3.3 EC turf herbicide or injury may occur.

PRE-M 3.3 EC turf herbicide sprays can be safely applied over-the-top of those plants listed below.

DO NOT APPLY PRE-M 3.3 EC turf herbicide in greenhouses, shadehouses or other enclosed structures.

ORNAMENTAL TANK MIXES

Emerged weeds in ornamentals can be controlled using tank mixes containing Roundup PRO³, Finale¹, Ornamec², Gallery⁴, Princep⁶, and other similar products. Do not apply sprays containing Roundup PRO or Finale over the top of ornamental plants.

Before tank mixing a simple jar test is recommended to insure compatibility of herbicides.

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Refer to manufacturers' labels for specific use directions, precautions, and limitations before tank mixing with PRE-M 3.3 EC turf herbicide and follow those that are most restrictive.

RECOMMENDED SPECIES

PRE-M 3.3 EC turf herbicide sprays are safe around and over the top of the established plants listed below. However, not all varieties or strains of the plants listed have been tested. Unintentional consequences such as crop injury may result because of certain environmental or growing conditions, manner of use or application.. Therefore, before treating a large number of plants, spray a few plants and observe for plant damage prior to full scale application.

Refer to Table on WEED SPECIES CONTROLLED for rates.

TREES

<u>Common Name</u>

Alder, European black Apple Arborvitae, American Arbutus Ash, Red Ash, White Aspen, Bigtooth Aspen, Quaking Basswood Birch, European Weeping Birch, River Buckeye, Red Cedar, White Chamaecyparis, Boulevard Cherry, Black Cherry, Choke Cherry, Kwanzan Cherry, Nanking Cottonwood Crabapple Crepe myrtle Cryptomeria, Japanese Cedar Cypress, Bald Cypress, Leyland Dogwood, Flowering Dogwood, Korean Dogwood, Silky Dogwood, Shrub Elm Fir, Balsam

Scientific Name

Alnus glutinosa Malus spp. Thuja occidentalis Arbutus spp. Fraxinus pennsylvanica Fraxinus americana Populus grandidentata Populus tremuloides *Tilia* spp. Betula pendula Betula nigra Aesculus pavia Thuja occidentalis Chamaecyparis pisifera Prunus serotina Prunus virginiana Prunus serrulata Prunus tomentosa Populus deltoides Malus spp. Lagerstroemia indica Cryptomeria japonica Taxodium distichum Cupressocyparis leylandii Cornus florida Cornus kousa Cornus amomum Cornus spp. Ulmus japonica Abies balsamae

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Fir, Douglas Fir, Fraser Fir, White Franklinia Ginkgo Gum, Black Gum, Sour Haw, Black Hawthorn Hemlock, Canada Hemlock, Eastern Holly, American Honeylocust Lilac, Common Lilac, Japanese Tree Linden Magnolia, Saucer Magnolia, Southern Magnolia, Star Maidenhair Tree Maple, Norway Maple, Japanese Maple, Red Maple, Sugar Nannyberry, Rusty Oak, Chinquapin Oak, Live Oak, Pin Oak, Red Oak, Swamp chestnut Oak, Water Oak, White Oak, Willow Olive Palm, Date Palm, Fan Palm, Pindo Palm, Washington Peach Pear, Bradford Pecan Pine, Austrian Pine, Italian Stone Pine, Loblolly Pine, Monterey Pine, Red Pine, Scotch Pine, Slash

Pseudotsuga menziesii Abies fraseri Abies concolor Franklinia spp. Ginkgo biloba Nyssa sylvatica Nyssa sylvatica Viburnum prunifolium Crataegus spp. Tsuga canadensis Tsuga canadensis Ilex opaca Gleditsia triacanthos Syringa vulgaris Syringa reticulata Tilia spp. Magnolia soulangiana Magnolia grandiflora Magnolia stellata Ginkgo biloba Acer platanoides Acer palmatum Acer rubrum Acer saccharum Viburnum rufidulum Ouercus muehlenbergii **Ouercus** virginiana Quercus palustris Quercus rubra Ouercus michauxii Quercus nigra Quercus alba Quercus phellos Olea europaea Phoenix spp. Washingtonia spp. Butia spp. Washingtonia spp. Prunus persica Pyrus calleryana 'Bradford' Carya illinoensis Pinus nigra Pinus pinea Pinus taeda Pinus radiata Pinus resinosa Pinus sylvestris Pinus elliottii

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Pine, Virginia Pine, White Plum, Purple Leaf Poplar, Black Redcedar, Eastern Redcedar, Western Red Ironbark Redwood, Dawn Sequoia, Giant Serviceberry Sourwood Spruce, Colorado Blue Spruce, Dwarf Alberta Spruce, Norway Spruce, White Sweetgum Sycamore Trachycarpus Tulip tree Walnut, Black Willow, Weeping Yellowwood

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SHRUBS

Common Name

Abelia, Glossy Aucuba, Gold Azalea Bamboo, Heavenly Barberry Barberry, Japanese Blue Indigo Bush Bottlebrush, Lemon Boxwood, Common Boxwood, Japanese Camellia Cape jasmine Cordyline Correa Cotoneaster Cotoneaster, Bearberry Cotoneaster, Rock Cypress, Italian Cypress, Leyland Deutzia, Slender

Pinus virginiana Pinus strobus Prunus cerasifera Populus nigra Juniperus virginiana Thuja plicata Eucalyptus sideroxylon 'Rosea' Metasequoia glyptostroboides Sequoiadendron giganteum Amelanchier laevis Oxydendrum arboreum Picea pungens Picea glauca 'albertiana' Picea abies Picea glauca Liquidambar styraciflua Platanus occidentalis Trachycarpus spp. Liriodendron tulipifera Juglans nigra Salix babylonica Cladrastis lutea

Scientific Name

Abelia grandiflora Aucuba japonica Rhododendron spp. Nandina domestica Berberis gladwynensis Berberis thunbergii Dalea gregii Callistemon citrinus Buxus sempervirens Buxus microphylla Camellia japonica Gardenia jasminoides Cordyline spp. Correa spp. Cotoneaster apiculatus Cotoneaster dammeri Cotoneaster horizontalis Cupressus sempervirens *Cupressocyparis leylandii* Deutzia gracilis

Dogwood, Red Twig Elaeagnus Escallonia Euonymus Euonymus, Golden Euonymus, Winged Firethorn Forsythia, Border Fragrant Olive Fuschia, California Gardenia Hawthorne, Indian Hibiscus Holly, Chinese Holly, Japanese Holly, Fosters Holly, Savannah Holly, Yaupon Honeysuckle, Bush Juniper Juniper, Chinese Juniper, Shore Juniper, Trailing Laurel, Cherry Laurel, Mountain Laurel. Otto Luvken Laurel, Schipka Laurustinus Lavender, English Leucothoe Leucothoe, Coast Lilac, Cut-leaf Lily-of-the-Nile Mahonia Mock Orange Myrtle, Compact Myrtle, Wax Nandina Oleander Oregon Grape Osmanthus Palm, European Fan Palm, Mediterranean Fan Phlox, Prickly Photinia, Fraser Pieris, Japanese Pine, Mugo Plum, Natal

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Cornus sericea Elaeagnus ebbingei Escallonia fradesii Euonymus fortunei Euonymus japonica Euonymus alata Pyracantha coccinea Forsythia intermedia Osmanthus fragrans Zauschineria californica Gardenia jasminoides Raphiolepis indica Hibiscus syriacus Ilex cornuta Ilex crenata Ilex attenuata 'Fosteri' Ilex attenuata Ilex vomitoria Diervilla lonicera Juniperus spp. Juniperus chinensis v. pfitzer Juniperus conferta Juniperus horizontalis Prunus laurocerasus Kalmia latifolia Prunus laurocerasus Prunus schipkanensis Viburnum tinus Lavandula angustifolia Leucothoe fontanesiana Leucothoe axillaris Syringa laciniata Agapanthus africanus Mahonia aquifolium Pittosporum tobira Myrtus communis Myrica cerifera Nandina domestica Nerium oleander Mahonia aquifolium Osmanthus fragrans Chamaerops humilis Chamaerops spp. Leptodactylon californicum Photinia X Fraseri Pieris japonica Pinus mugo Carissa grandiflora

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Privet, California Privet, Glossy Privet, Variegated Privet, Waxleaf Pyracantha Quince, Flowering Ranger, Texas Redroot Rhododendron Robira Spice Plant Spiraea Spiraea, Anthony Waterer Spiraea, Japanese Sweet Bay Trumpet Bush Verbena, Lemon Viburnum Vitex Weigela Wild Lilac Xylosma Yellowbells Yew Yew, Japanese Yew, Southern Yucca, Adam's Yucca, Weeping

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GROUND COVERS

Common Name

Ajuga Capeweed Cinquefoil, Spring Daisy, Trailing African Gazania Iceplant, Large Leaf Ivy, English Ivy, Geranium Jasmine, Asiatic Jasmine, Primrose Mondograss Myoporum Pachysandra Potentilla

Ligustrum ovalifolium Ligustrum lucidum Ligustrum sinensis Ligustrum japonicum Pyracantha coccinea Chaenomeles japonica Leucophyllum frutescens Ceanothus spp. Rhododendron spp. Pittosporum tobiri Illicium parviflorum Spiraea vanhouttei Spiraea X bumalda Spirea japonica Laurus nobilis Tecoma stans Aloysia triphylla Viburnum suspensum Vitex spp. Weigela florida Ceanothus spp. Xylosma congestum Tecoma stans Taxus media Taxus cuspidata Podocarpus macrophyllus Yucca filamentosa Yucca pendula

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Scientific Name

Ajuga reptans Arctotheca calendula Potentilla verna Osteospermum fruticosum Gazania splendens Carpobrotus edulis Hedera helix Pelargonium peltatum Trachelospermum asiaticum Jasminum mesnyi Ophiopogon japonica Myoporum parviflolium Pachysandra terminalis Potentilla fruticosa

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Rose-Of-Sharon Wintercreeper 1

PERENNIALS

Common Name -

Bleeding Heart Calla lily Canna, common garden Chincherinchee Crinum Lily Fern, Asparagus Fern, Leatherleaf Freesia Heather, Dwarf Hosta Lily Liriope, Creeping Liriope, Variegated Montbretia Orchid, Peacock Peony, Chinese Wisteria Zephyr Lily

Hypericum calycinum Euonymous fortunei

Scientific Name

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Dicentra spectabilis Zantedeschia aethiopica Canna generalis 'Lucifer' Ornithogalum thyrsoides Crinum spp. Asparagus officinalis Rumohra adiantiformis Freesia x hvbrida Calluna vulgaris Hosta spp. Lillium spp. *Liriope spicata* Liriope muscari Crocosmia crocosmiiflora Acidanthera bicolor Paeonia lactiflora Wisteria spp. Zephyranthes spp.

ORNAMENTAL GRASSES

Common Name

Beach Grass Fescue, Blue Fescue, Sheep Fountain Grass Pampas Grass Reed Canary Grass Reed, Giant Ribbon Grass Tufted Hair Grass

Scientific Name

Ammophila breviligulata Festuca ovina Festuca ovina Pennisetum setaceum Cortaderia selloana Phalaris arundinacea Arundo spp. Phalaris arundinacea Deschampsia caespitosa

PRE-M 3.3 EC turf herbicide may be used on plant species not listed on this label. The suitability for such uses should be determined by treating a small number of such plants at the recommended rate. Treated plants should be evaluated 1-2 months following treatment for possible injury. THE USER ASSUMES RESPONSIBILITY FOR ANY CROP DAMAGE OR OTHER LIABILITY. Do not treat plants grown for food or feed. Do not use treated plants for food or feed.

WEED CONTROL IN CHRISTMAS TREE PLANTATIONS

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PRE-M 3.3 EC turf herbicide is recommended for preemergence control of the weed species listed on this label as they germinate in areas planted with the following Christmas trees:

* Austrian Pine	Pinus nigra
* Balsam Fir	Abies balsamae
Colorado Blue Spruce	Picea pungens
Douglas Fir	Pseudotsuga menziesii
* Scotch Pine	Pinus sylvestris
* Virginia Pine	Pinus virginiana
White Fir	Abies concolor
* White Spruce	Picea glauca

*Do not use in California.

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PRE-M 3.3 EC turf herbicide can be applied directly over the top of established Christmas trees. DELAY applying PRE-M 3.3 EC turf herbicide to seedbeds, transplant beds, or bareroot liners until plants have become well rooted.

PRE-M 3.3 EC turf herbicide will not control established weeds. Therefore, areas to be treated should be free of established weeds at the time of treatment, or PRE-M 3.3 EC turf herbicide may be used in conjunction with herbicides registered for postemergence use in Christmas trees. Consult the labels of those herbicides for suggested treatments, rates to be used and precautions or restrictions for use in Christmas trees.

WEED CONTROL IN NON-BEARING FRUIT AND NUT CROPS AND VINEYARDS

PRE-M 3.3 EC turf herbicide may be applied for preemergence control of most annual grasses and certain broadleaf weeds on the following non-bearing crops:

Almond	Olive
Apple	Peach
Apricot	Pear
Cherry	Pecan
Citrus	Pistachio
Fig	Plum
Grape	Prune
Nectarine	Walnut, English

Refer to Table on WEED SPECIES CONTROLLED for rates.

Apply the spray directly to the ground below the trees or vines. Care must be taken that soil or planting mixes have settled firmly following transplanting and that there are no cracks that would allow direct contact of PRE-M 3.3 EC turf herbicide and roots. Directed sprays where soil and media surfaces are uniformly covered will result in best weed control and plant tolerance. For newly

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transplanted and one year old grapevines, apply only when they are dormant. Do not apply if buds have started to swell. PRE-M 3.3 EC turf herbicide may be used where the roots of a fruit, vine, nut, or ornamental plant encroach into a treatable area.

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WEED SPECIES CONTROLLED

For preemergence control of the weed species listed, apply PRE-M 3.3 EC turf herbicide at the following rates:

Length of Control	PRE-M 3.3 EC turf herbicide	Ounces Required	
		to Treat 1000 sq. ft	
Short Term Control (2-4 months)	2.4 Quarts/Acre	1.8 oz.	
Long Term Control (6-8 months)	4.8 Quarts/Acre	3.6 oz.	

PRE-M 3.3 EC turf herbicide will not control established weeds.

The efficacy of PRE-M 3.3 EC turf herbicide will be improved if the application is followed by onehalf inch of rainfall or its equivalent in sprinkler irrigation. If PRE-M 3.3 EC turf herbicide is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

WEED CONTROL IN LAWNS AND TURF

PRE-M 3.3 EC turf herbicide provides preemergence control of most annual grasses and certain broadleaf weeds as they germinate in any turfgrass site (lawns. sod, turf areas). Examples of such sites include, but are not limited to: grounds or lawns around residential and commercial establishments, multifamily dwellings, military and other institutions, parks, airports, roadsides, schools, picnic grounds, athletic fields or jogging paths, areas around houses of worship, cemeteries; golf courses; prairiegrass areas; and sod farms.

<u>Turfgrass Types</u>: PRE-M 3.3 EC turf herbicide should only be applied to well established lawns and turf. PRE-M 3.3 EC turf herbicide can be used on the following turfgrasses: Bahiagrass, Bermudagrass, Centipededgrass, Fine Fescue, Kentucky Bluegrass, Perennial Ryegrass, St. Augustinegrass, Tall Fescue, Zoysiagrass.

GENERAL TURF INFORMATION

Use only on well-established turfgrass with a dense and uniform stand.

Do not use on greens or injury may occur.

PRE-M 3.3 EC turf herbicide treatments will not control established weeds. Applications must be made prior to germination of weeds.

Allow at least 2 months between applications except where indicated under RATE AND APPLICATION CHART.

PRECAUTIONS ON TURF

Not for use on bentgrass or *Poa annua* (putting greens and tees) or on dichondra, where these are desired species.

This product may cause yellowing and thinning of cool season grasses in winter overseeded turf.

Delay seeding by 3 months and sprigging by 5 months after application. Prior to seeding or sprigging, the soil surface should be disturbed or worked to dilute any remaining chemical residue.

On newly planted areas, wait until the grass has been mowed at least 4 times and has filled in before applying product.

On turf that has been severely thinned due to winter damage, excessive soil moisture, low temperature (below 40°F), scalping, insects, disease, etc., wait until turf has filled in and rooting of stolons is complete before applying.

This product may stain, thus avoid contact with areas such as sidewalks, driveways, etc. If contact with the spray mixture occurs, promptly rinse with water.

PRE-M 3.3 EC turf herbicide treatments are most effective in controlling weeds when adequate rainfall or overhead irrigation is received within 7 days after irrigation.

Weeds Species Controlled: When applied as directed, PRE-M 3.3 EC turf herbicide will control the following weed species:

GRASSES CONTROLLED

Common Name

Annual bluegrass Barnyardgrass Crabgrass Fall panicum Foxtail Goosegrass

Scientific Name

Poa annua Echinochloa crus-galli Digitaria spp. Panicum dichotomiflorum Setaria spp. Eleusine indica

BROADLEAF WEEDS CONTROLLED

Common Name

Common chickweed Cudweed

Scientific Name

Stellaria media Gnaphalium spp. 14 717

Hop clover Henbit Knotweed Mouseear chickweed Prostrate spurge Purslane Oxalis Evening primrose (

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Trifolium procumbens Lamium amplexicaule Polygonum avicularc Cerastium vulgatum Euphorbia supina Portulaca oleracea Oxalis spp. Oenothera biennis 15 817

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RATE AND APPLICATION CHART

Turf <u>Species</u>	Weeds Controlled	Rates of PRE-M 3.3 EC turf herbicide	<u>Comments</u>
Northern Grasses: Fine fescue Kentucky bluegrass Perennial ryegrass Tall fescue	Barnyardgrass Crabgrass Fall panicum Foxtail Hop clover Prostrate spurge Yellow woodsorrel Cudweed	3.6 to 4.8 pt per acre or 1.3 to 1.8 oz per 1,000 sq ft	Apply in Spring before weeds germinate. Repeat applica cation if necessary in 5 - 8 weeks at 2.5 - 3.6 pt per acre or 1 to 1.3 oz per 1,000 sq ft.
	Goosegrass Evening primrose	7.2 pt per acre or 2.6 oz per 1,000 sq ft	Apply in Spring before weeds germinate. Repeat application if necessary in 5 - 8 weeks at 2.5 - 3.6 pt per acre or 1 to 1.3 oz per 1,000 sq ft.
	Annual bluegrass Common chickweed Mouseear chickweed	3.6 pt to 4.8 pt per acre or 1.3 to 1.8 oz per 1,000 sq ft	Apply in late Summer to early Fall before weeds genninate.

Southern Grasses: Bahia Bermudagrass Centipedegrass St. Augustinegrass Tall fescue Zoysiagrass	Barnyardgrass Crabgrass Fall panicum Foxtail Prostrate spurge Yellow woodsorrel Cudweed	4.2 to 4.8 pt per acre or 1.6 to 1.8 oz per 1,000 sq ft	Apply in Spring before weeds germinate. Repeat application if necessary in 5 - 8 weeks using 2.5 – 3.6 pt per acre or 1 to 1.3 oz. per 1,000 sq ft.
	Goosegrass Hop clover Evening primrose	 6.4 to 7.2 pt per acre or 2.4 to 2.6 oz per 1,000 sq ft. Make a second application of 3.6 pt per acre or 1.3 oz per 1,000 sq ft at 5- 8 weeks. 	Apply in Spring before weeds germinate. An additional application of 3.6 pt per acre or 1.3 oz per 1,000 sq ft may be made for extended goosegrass control 8 weeks after the
	Henbit Annual bluegrass Common chickweed Mouseear chickweed	3.6 to 4.8 pt per acre or 1.3 to 1.8 oz per 1,000 sq ft	second application. Apply in late Summer to early Fall before weeds germinate.

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INDUSTRIAL (UNIMPROVED) TURF

Industrial, or unimproved turf areas often have a different spectrum of weeds to be controlled than those found in fine turf as described in this leaflet. PRE-M 3.3 EC turf herbicide will control annual grasses and broadleaf weeds mentioned in that section of this label as well as the following weeds that might germinate in established grasses in rights-of-way, roadsides, construction sites, parks, substations, lots, or similar areas:

Crowfootgrass, Itchgrass, Johnsongrass (from seed), Junglerice, Lovegrass, Browntop Panicum, Texas Panicum, Field Sandbur, Signalgrass, Mexican Sprangletop, Red Sprangletop, Witchgrass, Woolly Cupgrass, Carpetweed, Fiddleneck, Filaree, Kochia, Lambsquarters, Pigweed, Puncturevine, Florida Pusley, London Rocket, Shepherdspurse, Pennsylvania Smartweed, Annual Spurge, and Velvetleaf. Apply before weeds germinate. A postemergence herbicide such as 2,4-D, MSMA, or similar products may be tank mixed to control established weeds. Apply according to label instructions for the respective products and follow the most restrictive wording.

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TOTAL VEGETATION CONTROL

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PRE-M 3.3 EC turf herbicide may be tank mixed with ARSENAL⁵, PLATEAU⁵, Roundup PRO, Karmex⁷, Finale, Oust⁷, diuron, or other products to provide bare ground, or total vegetation control. PRE-M 3.3 EC turf herbicide can be used to provide greater plant selectivity in areas where such action may be desired. Such sites might have roots of landscape vegetation, ornamentals, or desirable trees encroaching into the treated zone. Refer to tank mix partner labels regarding effects on desirable plants. DO NOT tank mix with ARSENAL in California.

Applications may be made to existing weeds controlled by the partner herbicide. Recommended rates should be determined from the product labels prior to use. Follow the most restrictive label instructions.

For Kochia: Combinations of PRE-M 3.3 EC turf herbicide with ARSENAL or diuron are recommended if control has been a problem for other herbicides. For rates refer to RATE AND APPLICATION CHART.

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