

241-360

9/6/2001

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PRE-M® 3.3 EC TURF HERBICIDE

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*: 62.6%

TOTAL 100.0%

(1 gallon contains 3.3 lbs. of pendimethalin)

*Contains Petroleum Distillates

EPA Reg. No. 241-360

EPA Est. No. 241-MO-01

**KEEP OUT OF REACH OF CHILDREN
CAUTION/!PRECAUCION!**

PRECAUCION AL USUARIO

Si usted no entiende la etiqueta, 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 day or night, 800-832-HELP (4357).**

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.

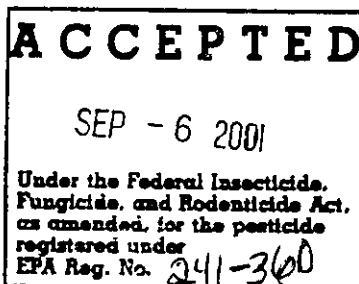
If swallowed: Call a poison control center or doctor for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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: Contains petroleum distillate – vomiting may cause aspiration pneumonia. 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

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BASF

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TOTAL VEGETATIVE CONTROL	2
0	

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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.

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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.

BASF Corporation 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 \geq 14 mils, nitrile rubber \geq 14 mils, neoprene rubber \geq 14 mils, or viton \geq 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.**

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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 BASF Corporation (BASF). All such risks shall be assumed by the user.

BASF 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. BASF 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. 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 ARSENAL® 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 institutions, 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 RESTRICTIONS

Apply PRE-M 3.3 turf herbicide to established plantings. PRE-M 3.3 EC turf herbicide sprays can be safely applied over-the-top of those plants listed below WITH THE FOLLOWING RESTIRCTIONS.

- **DO NOT** make applications to grafted (or budded) liners at any time.
- **DO NOT** make over-the-top applications to liners or transplants using PRE-M 3.3 turf herbicide.
- **DO NOT** apply PRE-M 3.3 turf herbicide to liners or transplants during bud break or at time of first flush of new growth.
- **Direct** sprays to soil when making applications to established liners or transplants. **DO NOT** allow spray to cover or penetrate foliage and/or buds or injury is likely to occur.
- **DELAY** applying PRE-M 3.3 turf herbicide to seedbeds, transplant beds, or liners until plants have become well rooted. Care must be taken that soil or planting mixes has settled firmly following transplanting and that there are no cracks that would allow direct contact of PRE-M 3.3 turf herbicide with roots. When established rootstock an application of PRE-M 3.3 turf herbicide can be made prior to budding/grafting the plants.
- Plant only those desirable plant species listed on this label into soil treated the previous season with PRE-M 3.3 turf herbicide or injury may occur.
- For container grown ornamentals, delay first application of this product to bareroot liners 2-4 weeks after transplanting.
- **DO NOT APPLY** PRE-M 3.3 turf herbicide in greenhouses, shadehouses or other enclosed structures.

It is recommended that treated plants be evaluated for 1-2 months prior to making application to a large number of plants. THE USER ASSUMES RESPONSIBILITY FOR ANY CROP DAMAGE OR OTHER LIABILITY.

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.

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

Common Name

Scientific Name

Alder, European black	<i>Alnus glutinosa</i>
Apple	<i>Malus</i> spp.
Arborvitae, American	<i>Thuja occidentalis</i>
Arbutus	<i>Arbutus</i> spp.
Ash, Red	<i>Fraxinus pennsylvanica</i>
Ash, White	<i>Fraxinus americana</i>
Aspen, Bigtooth	<i>Populus grandidentata</i>
Aspen, Quaking	<i>Populus tremuloides</i>
Basswood	<i>Tilia</i> spp.
Birch, European Weeping	<i>Betula pendula</i>
Birch, River	<i>Betula nigra</i>
Buckeye, Red	<i>Aesculus pavia</i>
Cedar, White	<i>Thuja occidentalis</i>
Chamaecyparis, Boulevard	<i>Chamaecyparis pisifera</i>
Cherry, Black	<i>Prunus serotina</i>
Cherry, Choke	<i>Prunus virginiana</i>
Cherry, Kwanzan	<i>Prunus serrulata</i>
Cherry, Nanking	<i>Prunus tomentosa</i>
Cottonwood	<i>Populus deltoides</i>
Crabapple	<i>Malus</i> spp.
Crepe myrtle	<i>Lagerstroemia indica</i>
Cryptomeria, Japanese Cedar	<i>Cryptomeria japonica</i>
Cypress, Bald	<i>Taxodium distichum</i>
Cypress, Leyland	<i>Cupressocyparis leylandii</i>
Dogwood, Flowering	<i>Cornus florida</i>
Dogwood, Korean	<i>Cornus kousa</i>
Dogwood, Silky	<i>Cornus amomum</i>
Dogwood, Shrub	<i>Cornus</i> spp.
Elm	<i>Ulmus japonica</i>
Fir, Balsam	<i>Abies balsamae</i>
Fir, Douglas	<i>Pseudotsuga menziesii</i>

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
 Pine, Virginia
 Pine, White
 Plum, Purple Leaf
 Poplar, Black
 Redcedar, Eastern
 Redcedar, Western
 Red Ironbark
 Redwood, Dawn

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
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 elliotii
Pinus virginiana
Pinus strobus
Prunus cerasifera
Populus nigra
Juniperus virginiana
Thuja plicata
Eucalyptus sideroxylon 'Rosea'
Metasequoia glyptostroboides

Sequoia, Giant
Serviceberry
Sourwood
Spruce, Colorado Blue
Spruce, Dwarf Alberta
Spruce, Norway
Spruce, White
Sweetgum
Sycamore
Trachycarpus
Tulip tree
Walnut, Black
Willow, Weeping
Yellowwood

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

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SHRUBS

Common Name

Scientific Name

Abelia, Glossy	<i>Abelia grandiflora</i>
Aucuba, Gold	<i>Aucuba japonica</i>
Azalea	<i>Rhododendron</i> spp.
Bamboo, Heavenly	<i>Nandina domestica</i>
Barberry	<i>Berberis gladwynensis</i>
Barberry, Japanese	<i>Berberis thunbergii</i>
Blue Indigo Bush	<i>Dalea gregii</i>
Bottlebrush, Lemon	<i>Callistemon citrinus</i>
Boxwood, Common	<i>Buxus sempervirens</i>
Boxwood, Japanese	<i>Buxus microphylla</i>
Camellia	<i>Camellia japonica</i>
Cape jasmine	<i>Gardenia jasminoides</i>
Cordyline	<i>Cordyline</i> spp.
Correa	<i>Correa</i> spp.
Cotoneaster	<i>Cotoneaster apiculatus</i>
Cotoneaster, Bearberry	<i>Cotoneaster dammeri</i>
Cotoneaster, Rock	<i>Cotoneaster horizontalis</i>
Cypress, Italian	<i>Cupressus sempervirens</i>
Cypress, Leyland	<i>Cupressocyparis leylandii</i>
Deutzia, Slender	<i>Deutzia gracilis</i>
Dogwood, Red Twig	<i>Cornus sericea</i>
Elaeagnus	<i>Elaeagnus ebbingei</i>
Escallonia	<i>Escallonia fradesii</i>
Euonymus	<i>Euonymus fortunei</i>
Euonymus, Golden	<i>Euonymus japonica</i>
Euonymus, Winged	<i>Euonymus alata</i>
Firethorn	<i>Pyracantha coccinea</i>
Forsythia, Border	<i>Forsythia intermedia</i>
Fragrant Olive	<i>Osmanthus fragrans</i>
Fuschia, California	<i>Zauschneria californica</i>
Gardenia	<i>Gardenia jasminoides</i>
Hawthorne, Indian	<i>Raphiolepis indica</i>
Hibiscus	<i>Hibiscus syriacus</i>
Holly, Chinese	<i>Ilex cornuta</i>
Holly, Japanese	<i>Ilex crenata</i>
Holly, Fosters	<i>Ilex attenuata</i> 'Fosteri'
Holly, Savannah	<i>Ilex attenuata</i>
Holly, Yaupon	<i>Ilex vomitoria</i>
Honeysuckle, Bush	<i>Diervilla lonicera</i>
Juniper	<i>Juniperus</i> spp.
Juniper, Chinese	<i>Juniperus chinensis</i> v. pfitzer
Juniper, Shore	<i>Juniperus conferta</i>
Juniper, Trailing	<i>Juniperus horizontalis</i>
Laurel, Cherry	<i>Prunus laurocerasus</i>
Laurel, Mountain	<i>Kalmia latifolia</i>
Laurel, Otto Luyken	<i>Prunus laurocerasus</i>
Laurel, Schipka	<i>Prunus schipkanensis</i>
Laurustinus	<i>Viburnum tinus</i>
Lavender, English	<i>Lavandula angustifolia</i>
Leucothoe	<i>Leucothoe fontanesiana</i>

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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
 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

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 filamentosa
Yucca pendula

* Applications should not be made during spring growth or injury to the terminals may occur.

GROUND COVERS**Common Name**

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

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 parvifolium
Pachysandra terminalis
Potentilla fruticosa
Hypericum calycinum
Euonymus fortunei

PERENNIALS**Common Name**

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

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
Crocsmia crocosmiiflora
Acidanthera bicolor
Paeonia lactiflora
Wisteria spp.
Zephyranthes spp.

ORNAMENTAL GRASSES

<u>Common Name</u>	<u>Scientific Name</u>
Beach Grass	<i>Ammophila breviligulata</i>
Fescue, Blue	<i>Festuca ovina</i>
Fescue, Sheep	<i>Festuca ovina</i>
Fountain Grass	<i>Pennisetum setaceum</i>
Pampas Grass	<i>Cortaderia selloana</i>
Reed Canary Grass	<i>Phalaris arundinacea</i>
Reed, Giant	<i>Arundo</i> spp.
Ribbon Grass	<i>Phalaris arundinacea</i>
Tufted Hair Grass	<i>Deschampsia caespitosa</i>

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

***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 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 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

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Common NameScientific Name

Barnyardgrass
 Bluegrass, Annual
 Crabgrass
 Crowfootgrass
 Foxtail, Giant
 Foxtail, Green
 Foxtail, Yellow
 Goosegrass
 Itchgrass
 Johnsongrass (from seed)
 Junglerice
 Lovegrass
 Panicum, Browntop
 Panicum, Fall
 Panicum, Texas
 Sandbur, Field
 Signalgrass
 Sprangletop, Mexican
 Sprangletop, Red
 Witchgrass
 Woolly Cupgrass

Echinochloa crus-galli
Poa annua
Digitaria spp.
Dactyloctenium aegyptium
Setaria faberi
Setaria viridis
Setaria lutescens
Eleusine indica
Rottboellia exaltata
Sorghum halepense
Echinochloa colonum
Eragrostis spp.
Panicum fasciculatum
Panicum dichotomiflorum
Panicum texanum
Cenchrus incertus
Brachiaria platyphylla
Leptochloa uninervia
Leptochloa filiformis
Panicum capillare
Eriochloa villosa

BROADLEAF WEEDS CONTROLLEDCommon NameScientific 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)

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.

Turfgrass Types: 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, Centipedegrass, 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. Always use 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

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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

Scientific Name

Annual bluegrass
Barnyardgrass
Crabgrass
Fall panicum
Foxtail
Goosegrass

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

BROADLEAF WEEDS CONTROLLED

Common Name

Scientific Name

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

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

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RATE AND APPLICATION CHART¹

Turf Species	Weeds Controlled	Rates of PRE-M 3.3 EC Turf Herbicide	Comments
<u>Northern Grasses:</u>			
Fine fescue	Barnyardgrass	3.6 to 4.8 pt	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.
Kentucky bluegrass	Crabgrass	per acre or 1.3	
Perennial ryegrass	Fall panicum	to 1.8 oz per	
Tall fescue	Foxtail	1,000 sq ft	
	Hop clover		
	Prostrate spurge		
	Yellow woodsorrel		
	Cudweed		
	Goosegrass	Residential² Turf Uses	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.
	Evening primrose	Only: 4.8 pt per acre or 1.8 oz per 1,000 sq ft	
		Commercial or Other Non-Residential Turf Uses Only: 7.2 pt per acre or 2.6 oz per 1,000 sq ft	
	Annual bluegrass	3.6 pt to 4.8 pt	Apply in late Summer to early Fall before weeds germinate.
	Common chickweed	per acre or	
	Mouseear chickweed	1.3 to 1.8 oz per 1,000 sq ft	
<u>Southern Grasses:</u>			
Bahia	Barnyardgrass	4.2 to 4.8 pt per	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.
Bermudagrass	Crabgrass	acre or 1.6 to	
Centipedegrass	Fall panicum	1.8 oz. per	
St. Augustinegrass	Foxtail	1,000 sq ft	
Tall fescue	Prostrate spurge		
Zoysiagrass	Yellow woodsorrel		
Cudweed			

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Goosegrass
Hop clover
Evening primrose

Residential² Turf Uses
Only: 4.8 pt
per acre or 1.8 oz
per 1000 sq ft

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 second
application.

**Commercial or
Other Non-
Residential Turf**
Uses Only: 7.2 pt per acre
or 2.6 oz per 1,000 sq ft

Make a second
application at 3.6 pt
per acre or 1.3 oz
per 1,000 sq ft at
5 - 8 weeks.

Henbit	3.6 to 4.8 pt	Apply in late Summer to early Fall before weeds germinate.
Annual bluegrass	per acre or 1.3	
Common chickweed	to 1.8 oz per	
Mouseear chickweed	1,000 sq ft	

¹**DO NOT** exceed a maximum rate of 4.8 pt per acre per application for use on residential turfgrass.
²Residential is defined as turf in any residential situation as well as schools, parks and playgrounds.
DO NOT exceed a maximum rate of 7.2 pt per acre per application for use on commercial or other non-residential turfgrass.

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 ARSENAL, PLATEAU[®], Roundup PRO, Karmex[®], Finale, Oust⁵, 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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