

241-360

5-18-2007

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Jeffrey H. Birk, Ph.D.
Regulatory Manager
BASF Corporation
26 Davis Drive
P.O. Box 13528
Research Triangle Park, NC 27709

SUBJECT: Applications for Pesticide Notification (PRN 98-10) – Add Ornamentals/Reorganize Label
Pre-M® 3.3 EC Turf Herbicide EPA Reg. No. 241-360
Pendulum® 2G Herbicide EPA Reg. No. 241-375
Applications Dated April 16, 2007

Dear Dr. Birk:

The Agency is in receipt of your Applications for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above products. The Registration Division (RD) has conducted a review of these requests for their applicability under PRN 98-10 and finds that the actions requested fall within the scope of PRN 98-10. The labels submitted with the applications have been stamped "Notification" and will be placed in our records.

If you have any questions, please contact me directly at 703-305-6249 or Terri Stowe of my staff at 703-305-6117.

Sincerely,

A handwritten signature in cursive script that reads "Linda Arrington".

Linda Arrington *for*
Notifications & Minor Formulations Team Leader
Registration Division (7505P)
Office of Pesticide Programs



The Chemical Company

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April 13, 2007

U.S. Environmental Protection Agency
Office of Pesticide Programs (7505P)
Document Processing Desk 7504P (NOTIF)
Room S-4900
One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202
Attention: Mr. James Tompkins, (PM 25)

NOTIFICATION

MAY 18 2007

**RE: Notification:
Labeling changes for Pre-M® 3.3 EC Turf herbicide
EPA Reg. No. 241-360**

Dear Mr. Tompkins:

BASF is hereby submitting a notification of minor label changes for Pre-M 3.3 EC Turf herbicide (EPA Reg. No. 241-360). The changes include the reorganization of Ornamental Instructions and Restrictions into a table format on page 6, the addition of Seashore *Paspalum* to warm season grasses on page 14, and several typographical changes throughout the text.

Enclosed please find:

- Application form 8570-1
- CD containing electronic copy of the label
- Certification with-Respect to-Label Integrity
- Pre-M 3.3 EC Turf herbicide label.
- Current Pre-M 3.3 EC Turf herbicide label

No PRIA fee is required for this notification.

Thank you for your assistance with this matter. If you should have any questions, please feel free to call me at (919) 547-2622.

Regards,

Jeffrey H. Birk, Ph.D.
Regulatory Manager
Phone 919-547-2622
Fax: 919-547-2850
Email: jeffrey.birk@basf.com

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Please read instructions on reverse before completing form.

Form Approved, OMB No. 2070-0060, Approval expires 2-28-95



United States
Environmental Protection Agency
Washington, DC 20460

Registration
 Amendment
 Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 241-360	2. EPA Product Manager James Tompkins	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Pre-M 3.3 EC Turf herbicide	PM# 25	
5. Name and Address of Applicant (Include ZIP Code) BASF 26 Davis Drive Research Triangle Park, NC 27709 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

Amendment - Explain below. Final printed labels in response to Agency letter dated _____

Resubmission in response to Agency letter dated _____ "Me Too" Application.

Notification - Explain below. Other - Explain below.

NOTIFICATION

MAY 18 2007

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Notification of minor label changes for Pre-M 3.3 EC Turf herbicide (241-360). This notification is consistent with the provisions of PR Notice 95-2 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

This notification is not subject to a fee under PRIA. Contact Jeff Birk at 919-547-2622 (phone), 919-547-2850 (fax) or by Email at jeffrey.birk@basf.com

Section - III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	2. Type of Container <input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
* Certification must be submitted		If "Yes" Unit Packaging wgt. No. per container	If "Yes" Package wgt. No. per container

3. Location of Net Contents Information
 Label Container

4. Size(s) Retail Container _____

5. Location of Label Directions

6. Manner in Which Label is Affixed to Product
 Lithograph Other _____
 Paper glued Stenciled

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)

Name Jeffrey H. Birk	Title Regulatory Manager	Telephone No. (Include Area Code) 919-547-2622
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Certification
I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

2. Signature

3. Title
Regulatory Manager

4. Typed Name
Jeffrey H. Birk

5. Date
April 13, 2007

6. Date Application Received (Stamped)

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NOTIFICATION

MAY 18 2007

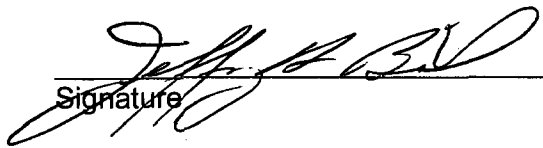
Certification with Respect to Label Integrity

version: 9/11/02

I certify that the information (including, but not limited to, text, tables, and graphics) contained in the electronic file identified below by file name and submitted with this certification is the same information as that on the paper copies of these documents included with this submission.

PROPOSED LABEL		
EPA Registration #	Date Submitted to EPA	Electronic file name
241-360	4-13-07	000241-00360.20070413.NVA 2007-04-127-0014

I certify that the statements that I have made on this form are true, accurate, and complete. I acknowledge that any knowingly false or misleading statements may be punishable by fine or imprisonment or both under applicable law.



 Signature

04/13/2007

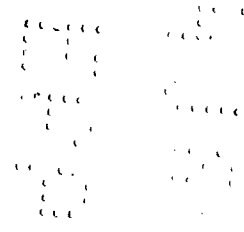
 Date

Jeffrey H. Birk

 Name (typed)

Regulatory Manager

 Title



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The Chemical Company

NOTIFICATION

MAY 18 2007

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, Nonbearing 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. _____

KEEP OUT OF REACH OF CHILDREN.

DANGER/PELIGRO

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.)

See inside for complete **First Aid, Precautionary Statements, Directions For Use, Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

Net Contents: _____

BASF Corporation, Agricultural Products
26 Davis Drive, Research Triangle Park, NC 27709

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FIRST AID	
If in eyes	<ul style="list-style-type: none"> • 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 eyes. • Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> • Immediately call a poison control center or doctor. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT GIVE ANY LIQUID TO THE PERSON. • DO NOT give anything by mouth to an unconscious person.
If on skin or clothing	<ul style="list-style-type: none"> • 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.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
<p>NOTE TO PHYSICIAN: Contains petroleum distillate. Vomiting may cause aspiration pneumonia. Because of increased chemical pneumonia or pulmonary edema caused by aspiration of the hydrocarbon solvent, vomiting should be induced only under professional supervision.</p>	
HOT LINE NUMBER	
<p>Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-832-HELP (4357) for emergency medical treatment information.</p>	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION!

Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with eyes, skin or clothing.

Personal Protective Equipment (PPE)

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.

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 (≥ 14 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 ≥ 14 mils
- Shoes plus socks
- Goggles or face shield

WPS USES:

Mixers, loaders, applicators and all other handlers must wear:

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

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. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. **DO NOT** reuse them.

Engineering Controls:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240)(d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

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 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 any person or pet, either directly or through drift. Keep people and pets out of the area during application. 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 ≥ 14 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.

STORAGE AND DISPOSAL

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

PESTICIDE 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 the container. If crystallization does occur, store the container on its side at room temperature (70° F) and rock occasionally until crystals redissolve.

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** not consistent with this label can result in injury to crops, animals, or persons. Keep containers closed to avoid spills and contamination.

GENERAL INFORMATION

Pre-M 3.3 EC 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** can be used for preemergence weed control in interior landscapes, or on ornamental gardens or parks, or on golf courses or lawns and landscape plantings.

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

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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** 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** 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 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** is to be used in tank mixtures with other registered herbicides; follow directions on the labels of those products which recommend tank mixing.

Backpack Sprayer: Begin with a clean spray tank. Fill the spray tank one-half full with clean water and add the required amount of **Pre-M 3.3 EC** 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** to the 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** may be impregnated on dry bulk fertilizers. When applied as directed, **Pre-M 3.3 EC**/dry bulk fertilizer mixtures provide weed control equal to that provided by the same rates of **Pre-M 3.3 EC** applied in water.

SPRAYING INSTRUCTIONS

GROUND APPLICATIONS

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. Suggested spray volumes are 20 to 200 gpa for professional turfgrass, landscape and ornamental applications, and 10 to 200 gpa for all other noncrop applications such as roadsides, utility rights-of-way or soft-residual bare ground applications. Maintain continuous agitation during spraying with good mechanical or bypass agitation. Avoid overlaps that will increase rates above those rec-

ommended. Avoid application when winds may cause drift.

Avoid unintentional contact of spray solution with driveways, stone, wood, or other porous surfaces. Rinse immediately with water to avoid staining. Avoid mechanically scrubbing until surface area is thoroughly rinsed. Treated turfgrass should be dry before entering to avoid staining onto non-treated surfaces.

AERIAL APPLICATIONS

Uniformly apply in 5 or more gallons of water per acre. Exercise caution to minimize drift. **DO NOT** apply during periods of gusty winds or when wind conditions favor drifting. Spray drift can cause injury to sensitive crops. It is recommended that a flagman or an automatic mechanical flagging unit on the aircraft be used to avoid overlapping and possible crop injury.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops:

1. The distance of the outermost nozzles on the boom must not exceed $\frac{3}{4}$ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the aerial drift reduction advisory information presented below.

INFORMATION ON DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see **WIND, TEMPERATURE AND HUMIDITY**, and **TEMPERATURE INVERSIONS**).

CONTROLLING DROPLET SIZE

- **Volume** - Use high flow-rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - **DO NOT** exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow-rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.

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- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is recommended practice. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid-stream nozzles oriented straight back produce the largest droplets and the lowest drift.

BOOM LENGTH

For some use patterns, reducing the effective boom length to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the upwind and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller droplets, etc.).

WIND

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light, variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light-to-no-wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be

identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SENSITIVE AREAS

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, or nontarget crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

NONCROPLAND WEED CONTROL

Pre-M® 3.3 EC turf herbicide is recommended for pre-emergence 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** 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** and **Arsenal** prior to use. See table on **WEED SPECIES CONTROLLED** for rates.

PRODUCTION AND ESTABLISHED LANDSCAPE ORNAMENTALS

Pre-M 3.3 EC 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 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.

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

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ORNAMENTAL INSTRUCTIONS AND RESTRICTIONS¹	
Site	Application Instructions and Restrictions
Newly transplanted field-grown nursery stock	<ul style="list-style-type: none"> • DO NOT make over-the-top applications at time of field transplanting. Use shielded sprayer until plantings have been established for one (1) year or more in the field. • DO NOT APPLY until transplants have been watered and soil has been thoroughly packed and settled around transplants. Care must be taken to ensure there are no cracks in the soil where Pre-M[®] 3.3 EC turf herbicide could come into contact with the roots. • DO NOT APPLY during bud swell, bud break or at time of first flush of new growth. • Direct sprays away from grafted or budded tissue on transplants at all times.
Newly transplanted container-grown nursery stock	<ul style="list-style-type: none"> • DO NOT APPLY until transplants have been watered and soil has been thoroughly packed and settled around transplants. Care must be taken to ensure there are no cracks in the soil where Pre-M 3.3 EC could come into contact with the roots. • For container-grown ornamentals, delay first application of the product to bare root liners for two (2) to four (4) weeks after transplanting. • DO NOT APPLY during bud swell, bud break or at time of first flush of new growth. • Direct sprays away from grafted or budded tissue on transplants at all times.
Established container, field-grown nursery stock	<ul style="list-style-type: none"> • DO NOT APPLY during bud swell, bud break or at time of first flush of new growth. • Apply as a directed or over-the-top spray. • If newly budded or grafted rootstock, make an application using a shielded sprayer. • Care must be taken to ensure there are no cracks in the soil where Pre-M 3.3 EC could come into contact with the roots.
Landscape plantings	<ul style="list-style-type: none"> • DO NOT APPLY to newly transplanted ornamentals until plants have been watered and soil has been thoroughly packed and settled around roots. • Apply as a directed or over-the-top spray. • It is recommended to use the lowest labeled rate when making applications to annuals. Repeat applications can be made for extended landscape weed control.
Bare ground for container placement	<ul style="list-style-type: none"> • Apply to soil (including mulch, gravel, wood chips, or other permeable base) and water in; replace containerized ornamentals onto pad.
Greenhouses, shadehouses or other enclosed structures.	DO NOT APPLY in greenhouses, shadehouses or other enclosed structures.
¹ Plant only those desirable plant species listed on this label into soil treated the previous season with Pre-M 3.3 EC or injury may occur.	

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ORNAMENTAL TANK MIXES

Emerged weeds in ornamentals can be controlled using tank mixes containing **Roundup Pro**®, **Finale**®, **Ornamec**®, **Gallery**®, **Princep**®, 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 sprays are safe around and over the top of the established plants listed on the following pages. 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.

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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'
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, shrub	<i>Cornus</i> spp.
Dogwood, silky	<i>Cornus amomum</i>
Elm	<i>Ulmus japonica</i>
Fir, balsam	<i>Abies balsamae</i>
Fir, Douglas	<i>Pseudotsuga menziesii</i>
Fir, Fraser	<i>Abies fraseri</i>
Fir, white	<i>Abies concolor</i>
Franklinia	<i>Franklinia</i> spp.
Ginkgo	<i>Ginkgo biloba</i>
Gum, black	<i>Nyssa sylvatica</i>
Gum, sour	<i>Nyssa sylvatica</i>
Haw, black	<i>Viburnum prunifolium</i>
Hawthorn	<i>Crataegus</i> spp.
Hemlock, Canada	<i>Tsuga canadensis</i>
Hemlock, Eastern	<i>Tsuga canadensis</i>
Holly, American	<i>Ilex opaca</i>
Honeylocust	<i>Gleditsia triacanthos</i>
Lilac, common	<i>Syringa vulgaris</i>
Lilac, Japanese tree	<i>Syringa reticulata</i>
Linden	<i>Tilia</i> spp.
Magnolia, saucer	<i>Magnolia soulangiana</i>
Magnolia, Southern	<i>Magnolia grandiflora</i>

TREES (continued)	
Common Name	Scientific Name
Magnolia, star	<i>Magnolia stellata</i>
Maidenhair tree	<i>Ginkgo biloba</i>
Maple, Norway	<i>Acer platanoides</i>
Maple, Japanese	<i>Acer palmatum</i>
Maple, red	<i>Acer rubrum</i>
Maple, sugar	<i>Acer saccharum</i>
Nannyberry, rusty	<i>Viburnum rufidulum</i>
Oak, chinquapin	<i>Quercus muehlenbergii</i>
Oak, live	<i>Quercus virginiana</i>
Oak, pin	<i>Quercus palustris</i>
Oak, red	<i>Quercus rubra</i>
Oak, swamp chestnut	<i>Quercus michauxii</i>
Oak, water	<i>Quercus nigra</i>
Oak, white	<i>Quercus alba</i>
Oak, willow	<i>Quercus phellos</i>
Olive	<i>Olea europaea</i>
Palm, date	<i>Phoenix</i> spp.
Palm, fan	<i>Washingtonia</i> spp.
Palm, pindo	<i>Butia</i> spp.
Palm, Washington	<i>Washingtonia</i> spp.
Peach	<i>Prunus persica</i>
Pear, Bradford	<i>Pyrus calleryana</i> 'Bradford'
Pecan	<i>Carya illinoensis</i>
Pine, Austrian	<i>Pinus nigra</i>
Pine, Italian stone	<i>Pinus pinea</i>
Pine, loblolly	<i>Pinus taeda</i>
Pine, Monterey	<i>Pinus radiata</i>
Pine, red	<i>Pinus resinosa</i>
Pine, Scotch	<i>Pinus sylvestris</i>
Pine, slash	<i>Pinus elliotii</i>
Pine, Virginia	<i>Pinus virginiana</i>
Pine, white	<i>Pinus strobus</i>
Plum, purple leaf	<i>Prunus cerasifera</i>
Poplar, black	<i>Populus nigra</i>
Redcedar, Eastern	<i>Juniperus virginiana</i>
Redcedar, Western	<i>Thuja plicata</i>
Red ironbark	<i>Eucalyptus sideroxylon</i> 'Rosea'
Redwood, dawn	<i>Metasequoia glyptostroboides</i>
Sequoia, giant	<i>Sequoiadendron giganteum</i>
Serviceberry	<i>Amelanchier laevis</i>
Sourwood	<i>Oxydendrum arboreum</i>
Spruce, Colorado blue	<i>Picea pungens</i>
Spruce, dwarf Alberta	<i>Picea glauca</i> 'Albertiana'
Spruce, Norway	<i>Picea abies</i>
Spruce, white	<i>Picea glauca</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Sycamore	<i>Platanus occidentalis</i>
Trachycarpus	<i>Trachycarpus</i> spp.
Tulip tree	<i>Liriodendron tulipifera</i>
Walnut, black	<i>Juglans nigra</i>
Willow, weeping	<i>Salix babylonica</i>
Yellowwood	<i>Cladrastis lutea</i>

Refer to table on **WEED SPECIES CONTROLLED** for rates.

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, Fosters	<i>Ilex attenuata 'Fosteri'</i>
Holly, Japanese	<i>Ilex crenata</i>
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. 'Pfitzerana'
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>

SHRUBS (continued)	
Common Name	Scientific Name
Lavender, English	<i>Lavandula angustifolia</i>
Leucothoe	<i>Leucothoe fontanesiana</i>
Leucothoe, coast	<i>Leucothoe axillaris</i>
Lilac, cut-leaf	<i>Syringa laciniata</i>
Lily-of-the-Nile	<i>Agapanthus africanus</i>
Mahonia	<i>Mahonia aquifolium</i>
Mock orange	<i>Pittosporum tobira</i>
Myrtle, compact	<i>Myrtus communis</i>
Myrtle, wax	<i>Myrica cerifera</i>
Nandina	<i>Nandina domestica</i>
Oleander	<i>Nerium oleander</i>
Oregon grape	<i>Mahonia aquifolium</i>
Osmanthus	<i>Osmanthus fragrans</i>
Palm, European fan	<i>Chamaerops humilis</i>
Palm, Mediterranean fan	<i>Chamaerops</i> spp.
Phlox, prickly	<i>Leptodactylon californicum</i>
Photinia, fraser	<i>Photinia x Fraseri</i>
Pieris, Japanese	<i>Pieris japonica</i>
Pine, mugo	<i>Pinus mugo</i>
Plum, natal	<i>Carissa grandiflora</i>
Privet, California	<i>Ligustrum ovalifolium</i>
Privet, glossy	<i>Ligustrum lucidum</i>
Privet, variegated	<i>Ligustrum sinensis</i>
Privet, waxleaf	<i>Ligustrum japonicum</i>
Pyracantha	<i>Pyracantha coccinea</i>
Quince, flowering	<i>Chaenomeles japonica</i>
Ranger, Texas	<i>Leucophyllum frutescens</i>
Redroot	<i>Ceanothus</i> spp.
Rhododendron	<i>Rhododendron</i> spp.
Robira	<i>Pittosporum tobiri</i>
Spice plant	<i>Illicium parviflorum</i>
Spiraea	<i>Spiraea x vanhouttei</i>
Spiraea, Anthony waterer	<i>Spiraea x Bumalda</i>
Spiraea, Japanese	<i>Spiraea japonica</i>
Sweet bay	<i>Laurus nobilis</i>
Trumpet bush	<i>Tecoma stans</i>
Verbena, lemon	<i>Aloysia triphylla</i>
Viburnum	<i>Viburnum suspensum</i>
Vitex	<i>Vitex</i> spp.
Weigela	<i>Weigela florida</i>
Wild lilac	<i>Ceanothus</i> spp.
Xylosma	<i>Xylosma congestum</i>
Yellowbells	<i>Tecoma stans</i>
Yew*	<i>Taxus media</i>
Yew, Japanese*	<i>Taxus cuspidata</i>
Yew, Southern	<i>Podocarpus macrophyllus</i>
Yucca, Adam's	<i>Yucca filamentosa</i>
Yucca, weeping	<i>Yucca pendula</i>

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

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Refer to table on **WEED SPECIES CONTROLLED** for rates.

GROUND COVERS	
Common Name	Scientific Name
Ajuga	<i>Ajuga reptans</i>
Capeweed	<i>Arctotheca calendula</i>
Cinquefoil, spring	<i>Potentilla verna</i>
Daisy, trailing African	<i>Osteospermum fruticosum</i>
Gazania	<i>Gazania splendens</i>
Iceplant, large leaf	<i>Carpobrotus edulis</i>
Ivy, English	<i>Hedera helix</i>
Ivy, geranium	<i>Pelargonium peltatum</i>
Jasmine, Asiatic	<i>Trachelospermum asiaticum</i>
Jasmine, primrose	<i>Jasminum mesnyi</i>
Mondograss	<i>Ophiopogon japonica</i>
Myoporum	<i>Myoporum parvifolium</i>
Pachysandra	<i>Pachysandra terminalis</i>
Potentilla	<i>Potentilla fruticosa</i>
Rose-Of-Sharon	<i>Hypericum calycinum</i>
Wintercreeper	<i>Euonymus fortunei</i>
PERENNIALS	
Common Name	Scientific Name
Bleeding heart	<i>Dicentra spectabilis</i>
Calla lily	<i>Zantedeschia aethiopica</i>
Canna, common garden	<i>Canna generalis</i> 'Lucifer'
Chincherinchee	<i>Ornithogalum thyrsoides</i>
Crinum lily	<i>Crinum</i> spp.
Fern, asparagus	<i>Asparagus officinalis</i>
Fern, leatherleaf	<i>Rumohra adiantiformis</i>
Freesia	<i>Freesia x hybrida</i>
Heather, dwarf	<i>Calluna vulgaris</i>
Hosta	<i>Hosta</i> spp.
Lily	<i>Lilium</i> spp.
Liriope, creeping	<i>Liriope spicata</i>
Liriope, variegated	<i>Liriope muscari</i>
Montbretia	<i>Crocsmia crocosmiiflora</i>
Orchid, peacock	<i>Acidanthera bicolor</i>
Peony, Chinese	<i>Paeonia lactiflora</i>
Wisteria	<i>Wisteria</i> spp.
Zephyr lily	<i>Zephyranthes</i> spp.
ORNAMENTAL GRASSES	
Common Name	Scientific Name
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 to 2 months following treatment for possible injury. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, 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 is recommended for preemergence control of the weed species listed on this label as they germinate in areas planted with the following Christmas trees:

Common Name	Scientific Name
*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 can be applied directly over the top of established Christmas trees. **DELAY** applying **Pre-M 3.3 EC** to seedbeds, transplant beds, or bare root liners until plants have become well rooted.

Pre-M 3.3 EC 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** 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 NONBEARING FRUIT AND NUT CROPS AND VINEYARDS

Pre-M 3.3 EC may be applied for preemergence control of most annual grasses and certain broadleaf weeds on the following nonbearing crops:

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

Refer to table on **WEED SPECIES CONTROLLED** for rates.

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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** 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** at the following rates:

Length of Control	Pre-M 3.3 EC	Ounces Required to Treat 1000 sq ft
Short Term Control (2-4 months)	2.4 quarts/acre	1.8
Long Term Control (6-8 months)	4.8 quarts/acre	3.6

The efficacy of **Pre-M 3.3 EC** 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** is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

Pre-M 3.3 EC will not control established weeds.

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

GRASSES CONTROLLED	
Common Name	Scientific Name
Barnyardgrass	<i>Echinochloa crus-galli</i>
Bluegrass, annual	<i>Poa annua</i>
Crabgrass	<i>Digitaria</i> spp.
Crowfootgrass	<i>Dactyloctenium aegyptium</i>
Foxtail, giant	<i>Setaria faberi</i>
Foxtail, green	<i>Setaria viridis</i>
Foxtail, yellow	<i>Setaria lutescens</i>
Goosegrass	<i>Eleusine indica</i>
Itchgrass	<i>Rottboellia exaltata</i>
Johnsongrass (from seed)	<i>Sorghum halepense</i>
Junglerice	<i>Echinochloa colonum</i>
Lovegrass	<i>Eragrostis</i> spp.
Panicum, browntop	<i>Panicum fasciculatum</i>
Panicum, fall	<i>Panicum dichotomiflorum</i>
Panicum, Texas	<i>Panicum texanum</i>
Sandbur, field	<i>Cenchrus incertus</i>
Signalgrass	<i>Brachiaria platyphylla</i>
Sprangletop, Mexican	<i>Leptochloa uninervia</i>
Sprangletop, red	<i>Leptochloa filiformis</i>
Witchgrass	<i>Panicum capillare</i>
Woolly Cupgrass	<i>Eriochloa villosa</i>

BROADLEAF WEEDS CONTROLLED	
Common Name	Scientific Name
Burweed, lawn	<i>Soliva ptersoperma</i>
Carpetweed	<i>Mollugo verticillata</i>
Chickweed, common	<i>Stellaria media</i>
Chickweed, mouseear	<i>Cerastium vulgatum</i>
Clover, hop	<i>Trifolium procumbens</i>
Cudweed	<i>Gnaphalium</i> spp.
Evening primrose	<i>Oenothera biennis</i>
Fiddleneck	<i>Amsinckia intermedia</i>
Flaree	<i>Erodium</i> spp.
Henbit	<i>Lamium amplexicaule</i>
Knotweed (prostrate)	<i>Polygonum aviculare</i>
Kochia	<i>Kochia scoparia</i>
Lambsquarters	<i>Chenopodium album</i>
Pigweed	<i>Amaranthus</i> spp.
Puncturevine	<i>Tribulus terrestris</i>
Purslane	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Rocket, London	<i>Sisymbrium irio</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Speedwell, corn	<i>Veronica arvensis</i>
Spurge, annual	<i>Euphorbia</i> spp.
Spurge, prostrate	<i>Euphorbia humistrata</i>
Woodsorrel, yellow	<i>Oxalis stricta</i>
Velvetleaf (Buttonweed)	<i>Abutilon theophrasti</i>

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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 or cemeteries; golf courses; prairiegrass areas; and sod farms.

Turfgrass Types: **Pre-M 3.3 EC** should only be applied to well-established lawns and turf.

Pre-M 3.3 EC 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 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 **APPLICATION RATES FOR WEED CONTROL**.

MIXING AND APPLICATION INSTRUCTIONS

Add **Pre-M 3.3 EC** slowly to partially filled tank (one-half to three-quarters 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 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 to 50 psi) sprayers are recommended. Avoid application when winds may cause drift.

COMPATIBILITY

Pre-M 3.3 EC is compatible with most commonly used herbicides. When **Pre-M 3.3 EC** 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** 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** directly with liquid fertilizer. Premix one part of **Pre-M 3.3 EC** 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.

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 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** will control the following weed species:

GRASSES CONTROLLED	
Common Name	Scientific Name
Annual bluegrass	<i>Poa annua</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>
Crabgrass	<i>Digitaria</i> spp.
Fall panicum	<i>Panicum dichotomiflorum</i>
Foxtail	<i>Setaria</i> spp.
Goosegrass	<i>Eleusine indica</i>
BROADLEAF WEEDS CONTROLLED	
Common Name	Scientific Name
Common chickweed	<i>Stellaria media</i>
Cudweed	<i>Gnaphalium</i> spp.
Evening primrose	<i>Oenothera biennis</i>
Henbit	<i>Lamium amplexicaule</i>
Hop clover	<i>Trifolium procumbens</i>
Knotweed	<i>Polygonum aviculare</i>
Mouseear chickweed	<i>Cerastium vulgatum</i>
Oxalis	<i>Oxalis</i> spp.
Prostrate spurge	<i>Euphorbia supina</i>
Purslane	<i>Portulaca oleracea</i>

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DO NOT exceed a maximum of 7.2 pts/acre per application for use on commercial or other non-residential turfgrass.

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** is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

To prevent establishment of weeds along the edges of lawns, it may be necessary to overlap the spray three to six inches onto sidewalks or driveways, etc., to ensure effective application rates in these especially vulnerable sites. Where temporary discoloration of pavement is to be avoided, rinse immediately to avoid staining.

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** 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 may be tank mixed with **Arsenal®**, **Plateau®**, **Roundup Pro®**, **Karmex®**, **Finale®**, **Oust®**, diuron, or other products to provide bare ground, or total vegetation control. **Pre-M 3.3 EC** 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 **Asenal** 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** with **Arsenal** or diuron are recommended if control has been a problem for other herbicides. For rates, refer to

APPLICATION RATES FOR WEED CONTROL.

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TURFGRASSES			
APPLICATION RATES FOR WEED CONTROL ¹			
Turfgrass Species	Weeds Controlled	Rates of Pre-M® 3.3 EC turf herbicide	Comments
COOL SEASON GRASSES			
Bluegrass, Kentucky Fescue, fine Fescue, tall Ryegrass, perennial	Barnyardgrass Crabgrass Evening primrose Fall panicum Foxtail Hop clover Knotweed Oxalis <i>Poa annua</i> Prostrate spurge Purslane	3.6 to 4.8 pts/acre or 1.3 to 1.8 oz/1000 sq ft. Initial application prior to weed germination in spring.	Apply a repeat application of 2.5 to 3.6 pts/acre (1 to 1.3 oz/1000 sq ft) after 5 to 8 weeks for extended control or where heavy weed infestations are expected.
	Goosegrass	Residential² Turf Uses Only: 3.6 to 4.8 pts/acre or 1.3 to 1.8 oz/1000 sq ft. Initial application prior to weed germination in spring.	Apply a repeat application of 3.6 pts/acre (1.3 oz/1000 sq ft) if the lower rate was used initially or for extended goosegrass control.
	Goosegrass	Commercial or Other Non-Residential² Turf Uses: 3.6 to 7.2 pts/acre or 1.3 to 2.6 oz/1000 sq ft. Initial application prior to weed germination in spring.	Apply a repeat application of 3.6 pts/acre (1.3 oz/1000 sq ft) if the lower rate was used initially or for extended goosegrass control.
	Chickweed Corn speedwell Cudweed Henbit Lawn burweed <i>Poa annua</i>	3.6 to 4.8 pts/acre or 1.3 to 1.8 oz/1000 sq ft.	Apply in late summer or early fall prior to weed germination.
WARM SEASON GRASSES			
Bahiagrass Bermudagrass Buffalograss Centipedegrass Fescue, tall <i>Paspalum</i> , seashore St. Augustinegrass Zoysiagrass	Barnyardgrass Crabgrass Evening primrose Fall panicum Foxtail Hop clover Knotweed Oxalis <i>Poa annua</i> Prostrate spurge Purslane	Residential² Turf Uses Only: 3.6 to 4.8 pts/acre or 1.3 to 1.8 oz/1000 sq ft. Initial application prior to weed germination in spring.	Apply a repeat application of 2.5 to 3.6 pts/acre (1 to 1.3 oz/1000 sq ft) after 5 to 8 weeks if necessary.
	Goosegrass	3.6 pts/acre or 1.3 oz/1000 sq ft. Apply prior to weed germination in spring. Make a second application 6 to 8 weeks later.	An additional application of 3.6 pts/acre (1.3 oz/1000 sq ft) may be made for extended goosegrass control 8 weeks after the second application.
	Chickweed Corn speedwell Cudweed Henbit Lawn burweed <i>Poa annua</i>	2.6 to 4.8 pts/acre or 1.3 to 1.8 oz/1000 sq ft.	Apply in late summer or early fall prior to weed germination.
¹ DO NOT exceed a maximum of 4.8 pts/acre per application for use on residential turfgrass. ² Residential is defined as turf in any residential situation as well as schools, parks and playgrounds.			

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CONDITIONS OF SALE AND WARRANTY

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must 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 use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

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