

PRE-M[®] 1.5% Plus Fertilizer

PRE-EMERGENT WEED CONTROL
For Use on Turfgrasses, Ornamentals, Landscape or Grounds Maintenance, and Non-cropland Areas.

0-0-8

GUARANTEED ANALYSIS

Soluble Potash (K ₂ O)	8.00%
Sulfur (S) Total	2.90%
2.90% Combined Sulfur (S)	2.90%
DERIVED FROM: Sulfate of Potash.	
Chlorine (Cl) Max.	2.00%

Made in U.S.A. Produced under the following U. S. Patent: 5,750,130

Active Ingredient:	
Pendimethalin, N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzenamine*	1.50%
Inert Ingredients:	98.50%
Total	100.00%

*Licensed under one or more of the following U.S. Patents: 3,920,742; 4,066,441.

KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand this label, find someone to explain it to you in detail.)
See below for additional precautionary statements.

In case of emergency endangering life or property involving this product, call day or night, Chem-Trec 1-800-424-9300.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

FIRST AID

If swallowed	<ul style="list-style-type: none">Call a poison control center or doctor immediately for treatment advice.Have person sip a glass of water if able to swallow.Do not induce vomiting unless told to by the poison control center or doctor.Do not give anything by mouth to an unconscious person.
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 the first 5 minutes, then continue rinsing.Call a poison control center or doctor for treatment advice.
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.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact Chem-Trec at 1-800-424-9300 for emergency medical treatment information.

NOTE TO PHYSICIAN

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

Personal Protective Equipment (PPE):

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves
- 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.

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 by cleaning of equipment or disposal 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 pesticide application. 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
- 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 treated area until dusts have settled.

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

STORAGE AND DISPOSAL

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

Storage: DO NOT store above 120°F. Store in original containers and keep closed; reseal opened bag by folding top down and securing. Store in a cool, dry place.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Observe all cautions and limitations on this label and on the labels of products used in combination with this herbicide. Do not use this herbicide other than in accordance with the instructions set forth on this label. The use of this herbicide not consistent with this label can result in injury to turf, animals, or persons. Keep Container closed to avoid spills and contamination.

GENERAL INFORMATION

This product is a combination pre-emergent herbicide and fertilizer formulated to provide pre-emergence 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, houses of worship, cemeteries; golf courses; prairiegrass areas; and sod farms.

This product can be used in and around field, liner, and container grown ornamental nurseries; established landscape ornamentals and ornamental gardens; listed groundcovers and bulbs; nonbearing fruit and nut trees; conifer and hardwood seedling nurseries; and for plantation site preparation and maintenance.

In addition, this product can be applied for general grounds maintenance around areas such as parking lots, driveways and roadsides, alleyways, bike and jogging paths, vacant lots, buildings, stone gardens and gravel yards, markers and fence

lines, mulch beds and other similar areas. It may be used under asphalt or concrete treatments as part of a site preparation program.

This product is recommended for pre-emergence control of most annual grasses and certain broadleaf weeds as they germinate in any non-cropland area such as railroad, utility, highway, and pipeline rights-of-way; highway guardrails, delineators, and sign posts; bridge abutments and approaches; utility substations; petroleum tank farms; pumping installations; storage areas; fence rows; windbreaks and shelterbelts; paved or gravel surfaces; established wildflower plantings, and other similar areas where weed control is desired.

This product controls weeds as they germinate but will not control established weeds. Therefore, areas to be treated should be free of established weeds. For the control of established weeds, this product may be used in conjunction with herbicides registered for post-emergence use. Consult the labels of those herbicides for use rates, timings, and precautions or restrictions.

Unusually cold, excessively wet, or hot and dry conditions that delay germination or extend germination over a long period of time can reduce weed control.

The efficacy of this product will improve if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. If this product is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

Applied according to label directions and under normal growing conditions, this product will not cause turf injury. Over-application can result in turf stand loss, turf injury, or soil residues. Uneven application can decrease weed control or cause turf injury.

Seedling diseases, cold weather, excessive moisture, high soil pH, high soil salt concentration, or drought can weaken turfgrass and increase the possibility of turf damage from this product.

APPLICATION

Apply product uniformly at the recommended rate using a properly calibrated spreader (see table below for approximate settings). Check application routinely to determine proper calibration. Avoid overlaps that will increase rates above those recommended. Avoid application when winds may cause drift. Avoid contact of product with porous surfaces such as driveways, stone, or wood. Removing particles will help prevent staining.

SUGGESTED SPREADER SETTINGS

Spreader	Recommended Rates lb per 1000 sq ft (lb per acre)				
	1.5 (67)	2.3 (100)*	3.1 (133)	4.6 (200)	5.4 (233)**
LESCO Rotary Calibration Gauge	#11	#12	#14	#16	#17
Cyclone [®] or Spyrker [®]	3	3 ¼	4	4 ½	4 ¾

*Delivers 1.5 lb ai/A and 0.00 lb N/1,000 sq ft

**Delivers 3.5 lb ai/A and 0.00 lb N/1,000 sq ft

IMPORTANT: Spreader settings are only approximate. Age, condition of spreader, and operator speed can cause wide variation in application rate. Spreader should be calibrated prior to each application by the operator.

TURFGRASS APPLICATION CHART

Turfgrass Species	Weeds	Rates of PRE-M 1.5% Plus Fertilizer	Comments:
NORTHERN GRASSES			
Kentucky bluegrass Perennial ryegrass Fine fescue Tall fescue	crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	2.3 to 5.4 lb/1,000 sq ft (100-233 lb/acre) as the initial application prior to weed germination in the spring.	Apply a repeat application of 1.5 to 2.3 lb/1,000 sq ft (67-100 lb/acre) after a minimum of 4 weeks for extended control or where heavy weed infestations are expected.
	goosegrass	2.3 to 5.4 lb/1,000 sq ft (100-233 lb/acre) in the spring prior to weed germination.	Apply a repeat application of 1.5 lb/1,000 sq ft (67 lb/acre)
	cudweed <i>Poa annua</i> chickweed lawn burweed henbit corn speedwell	2.3 to 5.4 lb/1,000 sq ft (100-233 lb/acre)	Apply in late summer or early fall prior to weed germination.
Bentgrass and established <i>Poa annua</i> (1/2 inch height or taller)	crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	2.3 to 4.6 lb/1,000 sq ft (100-200 lb/acre) in the spring prior to weed germination.	Apply a repeat application of 1.5 to 2.3 lb/1,000 sq ft (67-100 lb/acre) after a minimum of 4 weeks for extended control or where heavy weed infestations are expected.
	goosegrass	2.3 to 3.1 lb/1,000 sq ft (100-133 lb/acre) prior to weed germination in the spring.	Apply a repeat application of 2.3 lb/1,000 sq ft (100 lb/acre) after a minimum of 4 weeks.
	cudweed <i>Poa annua</i> chickweed lawn burweed henbit corn speedwell	2.3 to 3.1 lb/1,000 sq ft (100-133 lb/acre)	Apply in late summer or early fall prior to weed germination.
SOUTHERN GRASSES			
Bermudagrass [®] St. Augustinegrass Bahia grass Buffalograss Zoysiagrass Centipedegrass Tall fescue	crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	2.3 to 5.4 lb/1,000 sq ft (100-233 lb/acre) prior to weed germination in the spring.	Apply a repeat application of 1.5 to 2.3 lb/1,000 sq ft (67-100 lb/acre) after a minimum of 4 weeks if necessary.
	goosegrass	2.3 to 5.4 lb/1,000 sq ft (100-233 lb/acre) prior to weed germination in the spring. Apply a repeat application 2.3 to 3.1 lb/1,000 sq ft (100-133 lb/acre) after minimum of 4 weeks.	An additional application of 1.5 lb/1,000 sq ft (67 lb/acre) may be applied for extended goosegrass control a minimum of 4 weeks after the second application.
	cudweed <i>Poa annua</i> chickweed lawn burweed henbit corn speedwell	2.3 to 5.4 lb/1,000 sq ft (100-233 lb/acre)	Apply in late summer or early fall prior to weed germination.

*Not for use on greens or tees

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

This product can be applied before or after post-emergence herbicides used to control emerged weeds in turfgrasses. For annual grass control applications can be made with Acclaim Extra¹ or MSMA to control emerged weeds. Broadleaf weeds can be controlled using Trimec², Three-Way³, 2,4-D, and other similar products.

TURFGRASS PRECAUTIONS

Use only on well established turfgrass with a dense and uniform stand. On newly planted areas, application should not be made until the turfgrass has filled in and has been mowed at least four times. On turf that has been thinned or damaged due to winter injury, excessive moisture, etc., allow for turf recovery prior to making an application.

Applications made to overseeded warm-season turfgrasses may cause thinning or injury of the overseeded species.

Do not use on bentgrass or *Poa annua* (greens and tees) or injury may occur.

Delay reseeding or winter overseeding treated turfgrass for at least 2 months following application. Do not sprig turfgrass for 3 months after application.

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 elsewhere in this leaflet. This product 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, Shepherd's purse, Pennsylvania Smartweed, Annual Spurge, and Velvetleaf.

Apply before weeds germinate. A post-emergence herbicide such as 2,4-D, MSMA, or similar product is recommended to control established weeds.

#069278 (front)

Net Weight: 50 lb (22.7 kg)

ORNAMENTALS - RECOMMENDED SPECIES

PRE-M 1.5% Plus Fertilizer is safe to use around and over the top of the established plants listed below.

Common Name	Scientific Name	Common Name	Scientific Name
TREES		SHRUBS	
Alder, European black	<i>Alnus glutinosa</i>	Abelia, Glossy	<i>Abelia grandiflora</i>
Apple	<i>Malus</i> spp.	Aucuba, Gold	<i>Aucuba japonica</i>
Arbutus, American	<i>Thuja occidentalis</i>	Azalea	<i>Rhododendron</i> spp.
Arbutus	<i>Arbutus</i> spp.	Banana, Heavenly	<i>Nandina domestica</i>
Ash, Red	<i>Fraxinus pennsylvanica</i>	Barberry	<i>Berberis gladiolifolia</i>
Ash, White	<i>Fraxinus americana</i>	Barberry, Japanese	<i>Berberis thunbergii</i>
Aspen, Bigtooth	<i>Populus grandidentata</i>	Blue Indigo Bush	<i>Dalea gregii</i>
Aspen, Quaking	<i>Populus tremuloides</i>	Bottlebrush, Lemon	<i>Callistemon citrinus</i>
Basswood	<i>Tilia</i> spp.	Boxwood, Common	<i>Buxus sempervirens</i>
Birch, European Weeping	<i>Betula pendula</i>	Boxwood, Japanese	<i>Buxus microphylla</i>
Birch, River	<i>Betula nigra</i>	Brittlebush	<i>Encelia farinosa</i>
Buckeye, Red	<i>Aesculus pavia</i>	Buttonbush	<i>Cephalanthus occidentalis</i>
Cedar, White	<i>Thuja occidentalis</i>	Camellia	<i>Camellia japonica</i>
Chamaecyparis, Boulevard	<i>Chamaecyparis pisifera</i>	Cape Jasmine	<i>Cassia jasminoides</i>
Cherry, Black	<i>Prunus serotina</i>	Cassia, Feathery	<i>Cassia artemisioides</i>
Cherry, Choke	<i>Prunus virginiana</i>	Cordylone	<i>Cordylone</i> spp.
Cherry, Kwanzan	<i>Prunus serrulata</i>	Correa	<i>Correa</i> spp.
Cherry, Nanking	<i>Prunus tomentosa</i>	Cotoneaster	<i>Cotoneaster apiculatus</i>
Cottonwood	<i>Populus deltoides</i>	Cotoneaster, Bearberry	<i>Cotoneaster dammeri</i>
Crabapple	<i>Malus</i> spp.	Cotoneaster, Rock	<i>Cotoneaster horizontalis</i>
Crepe Myrtle	<i>Lagerstroemia indica</i>	Cypress, Italian	<i>Cupressus sempervirens</i>
Cytoplomeria, Japanese cedar	<i>Cytoplomeria japonica</i>	Cypress, Leyland	<i>Cupressocyparis leylandii</i>
Cypress, Bald	<i>Taxodium distichum</i>	Deutzia, Slender	<i>Deutzia gracilis</i>
Cypress, Leyland	<i>Cupressocyparis leylandii</i>	Dogwood, Red Twig	<i>Cornus sericea</i>
Dogwood, Flowering	<i>Cornus florida</i>	Elaeagnus	<i>Elaeagnus ebbingei</i>
Dogwood, Korean	<i>Cornus kousa</i>	Escallonia	<i>Escallonia fradesii</i>
Dogwood, Silky	<i>Cornus amomum</i>	Euonymus	<i>Euonymus fortunei</i>
Dogwood, Shrub	<i>Cornus</i> spp.	Euonymus, Golden	<i>Euonymus japonica</i>
Elm	<i>Ulmus japonica</i>	Euonymus, Winged	<i>Euonymus alata</i>
Fir, Balsam	<i>Abies balsamiae</i>	Firethorn	<i>Pyracantha coccinea</i>
Fir, Douglas	<i>Pseudotsuga menziesii</i>	Forsythia, Border	<i>Forsythia intermedia</i>
Fir, Fraser	<i>Abies fraseri</i>	Fragrant Olive	<i>Osmanthus fragrans</i>
Fir, White	<i>Abies concolor</i>	Fuschia, California	<i>Zauschneria californica</i>
Franklinia	<i>Franklinia</i> spp.	Gardenia	<i>Gardenia jasminoides</i>
Ginkgo	<i>Ginkgo biloba</i>	Hawthorne, Indian	<i>Raphiolepis indica</i>
Gum, Black	<i>Nyssa sylvatica</i>	Hibiscus	<i>Hibiscus syriacus</i>
Gum, Sour	<i>Nyssa sylvatica</i>	Holly, Chinese	<i>Ilex cornuta</i>
Haw, Black	<i>Viburnum prunifolium</i>	Holly, Japanese	<i>Ilex crenata</i>
Hawthorn	<i>Crataegus</i> spp.	Holly, Fosters	<i>Ilex attenuata</i> 'Fosteri'
Hemlock, Canada	<i>Tsuga canadensis</i>	Holly, Savannah	<i>Ilex attenuata</i>
Hemlock, Eastern	<i>Tsuga canadensis</i>	Holly, Yaupon	<i>Ilex vomitoria</i>
Holly, American	<i>Ilex opaca</i>	Honeysuckle, Bush	<i>Diervilla lonicera</i>
Honeylocust	<i>Gleditsia triacanthos</i>	Hopseed Bush	<i>Dodonaea viscosa</i>
Lilac, Common	<i>Syringa vulgaris</i>	Hopbush	<i>Dodonaea viscosa</i>
Lilac, Japanese Tree	<i>Syringa reticulata</i>	Hydrangea	<i>Hydrangea macrophylla</i>
Linden	<i>Tilia</i> spp.	Juniper	<i>Juniperus</i> spp.
Magnolia, Saucer	<i>Magnolia soulangeana</i>	Juniper, Chinese	<i>Juniperus chinensis</i> v. pfitzer
Magnolia, Southern	<i>Magnolia grandiflora</i>	Juniper, Shore	<i>Juniperus conferta</i>
Magnolia, Star	<i>Magnolia stellata</i>	Juniper, Trailing	<i>Juniperus horizontalis</i>
Maidenhair Tree	<i>Ginkgo biloba</i>	Laurel, Cherry	<i>Prunus laurocerasus</i>
Maple, Norway	<i>Acer platanoides</i>	Laurel, Mountain	<i>Kalmia latifolia</i>
Maple, Japanese	<i>Acer palmatum</i>	Laurel, Otto Luyken	<i>Prunus laurocerasus</i>
Maple, Red	<i>Acer rubrum</i>	Laurel, Schipka	<i>Prunus schipkanensis</i>
Maple, Sugar	<i>Acer saccharum</i>	Laurustinus	<i>Viburnum tinus</i>
Nannyberry, Rusty	<i>Viburnum rufidulum</i>	Lavender, English	<i>Lavandula angustifolia</i>
Oak, Chinquapin	<i>Quercus muehlenbergii</i>	Leucothoe	<i>Leucothoe fontaniana</i>
Oak, Live	<i>Quercus virginiana</i>	Leucothoe, Coast	<i>Leucothoe axillaris</i>
Oak, Pin	<i>Quercus palustris</i>	Lilac, Cut-leaf	<i>Syringa laciniata</i>
Oak, Red	<i>Quercus rubra</i>	Lily-of-the-Nile	<i>Agapanthus africanus</i>
Oak, Swamp chestnut	<i>Quercus michauxii</i>	Mahonia	<i>Mahonia aquifolium</i>
Oak, Water	<i>Quercus nigra</i>	Mock Orange	<i>Pittosporum tobira</i>
Oak, White	<i>Quercus alba</i>	Myrtle, Compact	<i>Myrtus communis</i>
Oak, Willow	<i>Quercus phellos</i>	Myrtle, Wax	<i>Myrica cerifera</i>
Olive	<i>Olea europaea</i>	Nandina	<i>Nandina domestica</i>
Palm, Date	<i>Phoenix</i> spp.	Oleander	<i>Nerium oleander</i>
Palm, Fan	<i>Washingtonia</i> spp.	Oregon Grape	<i>Mahonia aquifolium</i>
Palm, Pindo	<i>Butia</i> spp.	Osmanthus	<i>Osmanthus fragrans</i>
Palm, Washington	<i>Washingtonia</i> spp.	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Peach	<i>Prunus persica</i>	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Pear, Bradford	<i>Pyrus calleryana</i> 'Bradford'	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Pecan	<i>Carya illinoensis</i>	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Pine, Austrian	<i>Pinus nigra</i>	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Pine, Italian Stone	<i>Pinus pinea</i>	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Pine, Loblolly	<i>Pinus taeda</i>	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Pine, Monterey	<i>Pinus radiata</i>	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Pine, Red	<i>Pinus resinosa</i>	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Pine, Scotch	<i>Pinus sylvestris</i>	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Pine, Slash	<i>Pinus elliottii</i>	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Pine, Virginia	<i>Pinus virginiana</i>	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Pine, White	<i>Pinus strobus</i>	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Plum, Purple Leaf	<i>Prunus cerasifera</i>	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Poplar, Black	<i>Populus nigra</i>	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Redcedar, Eastern	<i>Juniperus virginiana</i>	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Redcedar, Western	<i>Thuja plicata</i>	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Red Ironbark	<i>Eucalyptus sideroxylon</i> 'Rosea'	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Redwood, Dawn	<i>Metasequoia glyptostroboides</i>	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Sequoia, Giant	<i>Sequoiadendron giganteum</i>	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Serviceberry	<i>Amelanchier laevis</i>	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Sourwood	<i>Oxydendrum arboreum</i>	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Spruce, Colorado Blue	<i>Picea pungens</i>	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Spruce, Dwarf Alberta	<i>Picea glauca</i> 'albertiana'	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Spruce, Norway	<i>Picea abies</i>	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Spruce, White	<i>Picea glauca</i>	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Sweetgum	<i>Liquidambar styracillua</i>	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Sycamore	<i>Platanus occidentalis</i>	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Trachycarpus	<i>Trachycarpus</i> spp.	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Tulip tree	<i>Liriodendron tulipifera</i>	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Walnut, Black	<i>Juglans nigra</i>	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>
Willow, Weeping	<i>Salix babylonica</i>	Osmanthus, Humilis	<i>Osmanthus humilis</i>
Yellowwood	<i>Cladrastis lutea</i>	Osmanthus, Fragrans	<i>Osmanthus fragrans</i>

Common Name	Scientific Name	Common Name	Scientific Name
PERENNIALS		GROUND COVERS	
Acacia	<i>Acacia redolens</i>	Ajuga	<i>Ajuga reptans</i>
Asparagus	<i>Asparagus</i> spp.	Aptenia	<i>Aptenia cordifolia</i>
Aster, New York	<i>Aster novi-belgii</i>	Artemisia	<i>Artemisia filifolia</i>
Aster, Stokes	<i>Aster laevis</i>	Artemisia	<i>Artemisia biennis</i>
Baby's Breath	<i>Gypsophila elegans</i>	Artemisia	<i>Artemisia tridentata</i>
Beard-Tongue	<i>Penstemon</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Bellflower	<i>Campanula</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Bird of Paradise	<i>Caesalpinia pulcherrima</i>	Artemisia	<i>Artemisia tridentata</i>
Black-eyed Susan	<i>Rudbeckia hirta</i>	Artemisia	<i>Artemisia tridentata</i>
Blanket Flower	<i>Gaillardia X grandiflora</i>	Artemisia	<i>Artemisia tridentata</i>
Bleeding Heart	<i>Alcea spectabilis</i>	Artemisia	<i>Artemisia tridentata</i>
California Poppy	<i>Eschscholzia californica</i>	Artemisia	<i>Artemisia tridentata</i>
Calla Lily	<i>Zantedeschia aethiops</i>	Artemisia	<i>Artemisia tridentata</i>
Canna, common garden	<i>Canna generalis</i> 'Lucifer'	Artemisia	<i>Artemisia tridentata</i>
Carex	<i>Carex</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Chinerinchee	<i>Omithogalum thyrsoides</i>	Artemisia	<i>Artemisia tridentata</i>
Clover, Crimson	<i>Trifolium incarnatum</i>	Artemisia	<i>Artemisia tridentata</i>
Columbine	<i>Aquilegia</i> 'McKana Giant'	Artemisia	<i>Artemisia tridentata</i>
Coreopsis	<i>Coreopsis lanceolata</i>	Artemisia	<i>Artemisia tridentata</i>
Crinum Lily	<i>Crinum</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Crocus	<i>Crocus</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Daffodil	<i>Narcissus</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Daylily	<i>Hemerocallis</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Fairy Duster	<i>Calliandra eriophylla</i>	Artemisia	<i>Artemisia tridentata</i>
Fern, Asparagus	<i>Asparagus officinalis</i>	Artemisia	<i>Artemisia tridentata</i>
Fern, Boston	<i>Nephrolepis exaltata</i>	Artemisia	<i>Artemisia tridentata</i>
Fern, Leatherleaf	<i>Rumohra adiantiformis</i>	Artemisia	<i>Artemisia tridentata</i>
Fortnight Lily	<i>Moraea</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Foxglove	<i>Digitalis purpurea</i>	Artemisia	<i>Artemisia tridentata</i>
Freesia	<i>Freesia X hybrida</i>	Artemisia	<i>Artemisia tridentata</i>
Gaillardia	<i>Gaillardia pulchella</i>	Artemisia	<i>Artemisia tridentata</i>
Geum	<i>Geum</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Gladiolus	<i>Gladiolus</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Heather, Dwarf	<i>Calluna vulgaris</i>	Artemisia	<i>Artemisia tridentata</i>
Hosta	<i>Hosta</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Indian Blanket	<i>Gaillardia pulchella</i>	Artemisia	<i>Artemisia tridentata</i>
Lantana, Weeping	<i>Lantana montevidensis</i>	Artemisia	<i>Artemisia tridentata</i>
Leopards Bane	<i>Doronicum cordatum</i>	Artemisia	<i>Artemisia tridentata</i>
Lily	<i>Lilium</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Liriope, Big Blue	<i>Liriope muscari</i>	Artemisia	<i>Artemisia tridentata</i>
Liriope, Creeping	<i>Liriope spicata</i>	Artemisia	<i>Artemisia tridentata</i>
Liriope, Variegated	<i>Liriope muscari</i>	Artemisia	<i>Artemisia tridentata</i>
Moonbeam	<i>Coreopsis verticillata</i>	Artemisia	<i>Artemisia tridentata</i>
Montbretia	<i>Crocus crocosmiflorus</i>	Artemisia	<i>Artemisia tridentata</i>
Nightshade	<i>Solanum</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Orchid, Peacock	<i>Acidantha bicolor</i>	Artemisia	<i>Artemisia tridentata</i>
Oxeye Daisy	<i>Chrysanthemum leucanthemum</i>	Artemisia	<i>Artemisia tridentata</i>
Peony, Chinese	<i>Paeonia lactiflora</i>	Artemisia	<i>Artemisia tridentata</i>
Purple Coneflower	<i>Echinacea purpurea</i>	Artemisia	<i>Artemisia tridentata</i>
Purple Loosetrife	<i>Lythrum virgatum</i>	Artemisia	<i>Artemisia tridentata</i>
Rosemary	<i>Rosmarinus officinalis</i>	Artemisia	<i>Artemisia tridentata</i>
Sedge	<i>Carex</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Shafa Daisy	<i>Chrysanthemum X superbum</i>	Artemisia	<i>Artemisia tridentata</i>
Sweet Flag	<i>Acorus calamus</i>	Artemisia	<i>Artemisia tridentata</i>
Tickseed	<i>Coreopsis lanceolata</i>	Artemisia	<i>Artemisia tridentata</i>
Texas Bluebonnet	<i>Lupinus texensis</i>	Artemisia	<i>Artemisia tridentata</i>
Tulip	<i>Tulip</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Wisteria	<i>Wisteria</i> spp.	Artemisia	<i>Artemisia tridentata</i>
Wonder Flower	<i>Omithogalum thyrsoides</i>	Artemisia	<i>Artemisia tridentata</i>
Yarrow	<i>Achillea millefolium</i>	Artemisia	<i>Artemisia tridentata</i>
Zephyr Lily	<i>Zephyranthes</i> spp.	Artemisia	<i>Artemisia tridentata</i>

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

This product 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.

ORNAMENTAL BULBS

This product may be applied for control of susceptible annual weeds in ornamental bulbs listed on the label [crocus, daffodil (narcissus), gladiolus, tulip, etc.]. Apply this product prior to, during or after bulb emergence. If weeds have already germinated use a labeled post-emergence herbicide to control emerged weeds.

WILDFLOWERS

This product may be applied for control of susceptible annual weeds in plantings of wildflowers listed on the label (Black-eyed Susan, California Poppy, Coreopsis, Oxeye Daisy, etc.). This product may be applied to established perennial wildflowers before emergence of weeds or wildflowers. For wildflowers being established from seed, apply this product after wildflowers have emerged but prior to weed germination. If weeds have already germinated, add a labeled post-emergence product to control emerged weeds.

Due to the diversity of species and varieties which exist in areas where wildflowers are grown, the response to this product may vary greatly. Careful testing on desirable species is recommended to determine if area-wide applications can be made.

ORNAMENTAL PRECAUTIONS

Apply this product to established plantings. DELAY applying this product to seedbeds, transplant beds, or liners until plants have become well rooted. 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 this product with roots. Applications where soil and media surfaces are uniformly covered will result in best weed control and ornamental tolerance. Plant only those desirable plant species listed on this label into soil treated the previous season with this product or injury may occur.

For container grown ornamentals, delay first application of this product to bareroot liners 2-4 weeks.

LANDSCAPE AND GROUNDS MAINTENANCE

This product can be incorporated into landscape and grounds maintenance programs to provide extended pre-emergence control of most annual grasses and certain broadleaf weeds. Areas to be treated, such as mulch beds, parking areas and roadsides, fencelines and borders, around statuary or monuments, and similar areas, should be free of emerged weeds before application. To remove emerged weeds, treat the area with a post-emergence product labeled for such use.

Refer to APPLICATION RATE TABLE for rates. Avoid unintentional contact of granules with stone, wood, or other porous surfaces as staining may occur. Sweep immediately to avoid staining. If granules are crushed into surface, then rinse thoroughly.

NON-BEARING FRUIT AND NUT CROPS AND VINEYARDS

This product may be applied for pre-emergence control of most annual grasses and certain broadleaf weeds on the following non-bearing crops:

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

Refer to APPLICATION RATE TABLE for rates.

Apply this product 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 this product and roots. Applications 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. This product may be used where the roots of a fruit, vine, nut, or ornamental plant encroach into a treatable area.

NON-CROPLAND AREAS INCLUDING TREE PLANTATIONS

This product is recommended for grounds maintenance in non-cropland areas: pre-emergence control of the weed species listed in and around established tree plantations (including Christmas trees): in and around established ornamentals planted in non-cropland areas such as highway rights-of-way, and utility substations. This product may be used for hardwood and conifer regeneration on conservation reserve program land or similar areas.

Refer to APPLICATION RATE TABLE for rates.

This product may be applied at planting or to established trees. When making an application at planting, it is important that slit closure be achieved to prevent this product from directly contacting the tree roots or being washed into the root zone via the open slit or root stunting may occur.

TOTAL VEGETATIVE CONTROL

This product may be mixed with a granular formulation, or used in sequence with any formulation, of ARSENAL, Roundup, Karmex, Finale, Oust, diuron, or other products to provide bare ground, or total vegetation control. This product 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.

Applications may be made to existing weeds controlled by the partner herbicide. Recommended