

JAN 11 2002

Glenda Haage
Platte Chemical Company
410 18th Street
Greeley, CO 80631

Dear Ms. Haage:

SUBJECT: Balan Dry Flowable
Label Amendment
EPA Registration No. 34704-823
Submission Dated September 13, 2001

The label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable provided that you make the following revisions:

1. Since PPE are specified in the Precautionary Statements section under "Applicators and other handlers must wear...", delete the PPE statement following, "Avoid contact with skin or clothing," statement.

The amended label supersede all previously accepted ones. A stamped copy is enclosed for your records. Please submit one copy of your printed label before you release the product for shipment.

Sincerely yours,

Joanne I. Miller
Product Manager (23)
Herbicide Branch
Registration Division (7505C)

Enclosure

M. Cooke
1-14-02

ORYZALIN COATED GRANULES

A selective preemergence surface-applied herbicide for control of annual grasses and many broadleaf weeds in:

- Landscape Ornamentals
- Container Grown Ornamentals
- Field Grown Ornamentals
- Drainage Areas Under Shadehouse Benches
- Ornamental Bulbs
- Ground Covers/Perennials
- Christmas Tree Plantations
- Noncropland and Industrial Sites
- Non-bearing fruit and nut trees and non-bearing vineyards
- Established Warm Season Turf (including Bahiagrass, Bermudagrass, Buffalograss, Centipedegrass, St. Augustinegrass and Zoysiagrass)
- Tall Fescue (warm season areas)

Active Ingredient:

Oryzalin: 3,5 dinitro-*N,N*-dipropylsulfanilamide 1.67%
Inert Ingredients 98.33%
Total 100.00%

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 the label, find someone to explain it to you in detail.)

EPA REG. NO. 34704-823

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PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Avoid contact with skin or clothing. Wear long-sleeved shirt and long pants, sock and shoes. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

Personal Protective Equipment (PPE)

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on the EPA chemical-resistance category selection chart.

Applicators and other handlers must wear: Long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, shoes plus socks and protective eye-wear.

Follow manufacturer's instructions for cleaning/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.

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

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-228-5635, EXT. 136, OR CALL COLLECT, 612-851-8180, EXT. 136. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

ENVIRONMENTAL HAZARDS

This pesticide 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. Do not contaminate water when disposing of equipment washwaters or rinsate. Cover or incorporate spills.

Agricultural Chemical: Do not ship or store with food, feed, drugs or clothing.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

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 only apply to uses of this product that are covered by the Worker Protection Standard.

JAN 11 2002

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended for the pesticide
registered under EPA Reg. No.
34704-832

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Agricultural Use Requirements cont'd.

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 made of any waterproof material such as polyethylene or polyvinyl chloride, shoes plus socks and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

These requirements 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 in greenhouses. Do not allow children or pets on treated areas until granules are washed to the soil surface and the grass is dry.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Storage: Store in original container only. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.

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

GENERAL INFORMATION

This product is a preemergence herbicide for control of certain annual grasses and broadleaf weeds in container and landscape ornamentals, nursery stock, ground covers, established flowers, ornamental bulbs, non-bearing fruit and nut trees and non-bearing vineyards, Christmas tree plantations, non-cropland and established tall fescue and warm season turf (including bahiagrass, bermudagrass, buffalograss, centipedegrass, St. Augustinegrass, and zoysiagrass). Apply this product prior to germination of target weeds or immediately after cultivation. Length of weed control will vary with rate of this product applied, weed population, potting media or soil conditions, temperature, watering regime, and other factors. Following application, user should monitor and observe level of weed control over time to determine when additional applications may be needed. Repeat applications at 200 pounds per acre and higher should not be made sooner than 90 days after a previous application of this product. Do not apply over 900 pounds per acre total of this product within a 12 month period. Do not graze or feed forage from treated fields or orchards to livestock. Aerial application is prohibited except for agricultural uses in California.

GENERAL USE PRECAUTIONS

This product does not control established weeds. Existing weeds should be controlled by cultivation or with postemergence herbicides. Weed residues, prunings and trash should be removed or thoroughly mixed into soil prior to treatment. Soil should be in good condition and free of clods at the time of application. A single rainfall or sprinkler irrigation of 0.5 inches or more, or flood irrigation is required to activate this product. If rainfall or irrigation has not occurred within 21 days of application and tillage is possible, this product may be activated using cultivation equipment capable of uniformly mixing the herbicide into the upper 1-2 inches of soil. Failure to activate this product may result in erratic weed control. Do not apply when wind conditions favor drift of this product's granules from the target area.

Users who wish to use this product on plant species not recommended on this label may determine the suitability for such uses by treating a small number of such plants at a recommended rate. Prior to treatment of larger areas, the treated plants should be observed for any sign of herbicidal injury during 30 to 60 days of normal growing conditions to determine if the treatment is noninjurious to the target plant species. **The user assumes responsibility for any plant damage or other liability resulting from use of this product on plant species not recommended on this label.**

APPLICATION DIRECTIONS

Apply this product using a drop or rotary-type spreader designed to apply granular herbicides or insecticides. Calibrate application equipment prior to use according to manufacturer's directions. Check frequently to be sure equipment is working properly and distributing granules uniformly. Do not use spreaders that apply material in narrow concentrated bands. Avoid skips or overlaps as poor weed control or crop injury may occur. More uniform application may be achieved by spreading half of the required amount of product over the area and then applying the remaining half in swaths at right angles to the first.

APPLICATION TECHNIQUES FOR APPLYING THIS PRODUCT

- When using a drop-type spreader, a splash board mounted under the hopper will provide more even granule distribution.
- A chain fastened to the side of the spreader and allowed to drag on the soil surface can be used to mark the edge of the treated swath and help prevent skips or overlaps.

- For treating smaller areas or rows of nursery stock or ornamental beds, a hand held or push-type rotary applicator such as a whirlybird or cyclone unit is recommended. For hand held units, walk and turn the crank at a constant rate of speed.
- A shaker-type applicator made from a small container with holes punched in the bottom is recommended for small, difficult to treat areas. Carefully measure the amount of product needed to avoid over-application.

Established† Container Grown Ornamentals, Landscape Ornamentals, Nursery Stock, Ground Covers, Flowers, Ornamental Bulbs, Non-bearing Fruit and Nut Trees and Non-bearing Vineyards, Christmas Tree Plantations, and Non-cropland

This product is recommended as a preemergence treatment for control of certain annual grasses and broadleaf weeds in container grown ornamentals, landscape ornamentals, nursery stock, ground covers, established flowers, ornamental bulbs, non-bearing fruit and nut trees and non-bearing vineyards, Christmas tree plantations, and non-cropland.

Apply this product prior to germination of target weeds or immediately after cultivation.

Note: Refer to the "General Information" section of this label for general use precautions and information on application.

SPECIAL USE PRECAUTIONS

To avoid possible plant injury, do not apply this product to:

- plants or areas in greenhouses or other enclosed structures.
- nursery seedbeds or forest or Christmas tree seedling transplant beds.
- unrooted liners or cuttings that have been planted in pots for the first time.
- pots less than four inches wide.
- ground covers until they are established and well rooted.
- ornamental plantings where the likelihood of runoff onto lawn areas containing dichondra or cool season turfgrass species exists.
- Do not apply this product to the following plant species or injury may occur:
 - Begonia* spp. (begonia)
 - Coleus hybridus* (coleus)
 - Deutzia gracilis* (slender deutzia)
 - Pseudotsuga menziesii* (Douglas-fir)
 - Thuja occidentalis* "Techny" (Techny arborvitae)
 - Tsuga canadensis* (eastern hemlock)
- **Ice Plant:** When establishing unrooted ice plant (*Mesembryanthemum crystallinum* and *Carpobrotus edulis*) on coarse soils, do not exceed the 200 lb/acre rate of this product or crop injury may occur. After the ice plant is well established, a second application may be made.

† **Definition of established plantings:** Apply only to established plantings. Established plants are defined as those that have been transplanted into their final growing location for a sufficient period of time to allow the soil to be firmly settled around the roots from packing and rainfall or irrigation. Do not apply to seedbeds or seedling transplant beds.

Repeat applications should not be made sooner than 60 days after a previous application of this product. Do not apply over 900 pounds per acre total of this product within a 12 month period.

Unlisted plant species: Users who wish to use this product on plant species not recommended on this label may determine the suitability for such uses by treating a small number of such plants at a recommended rate. Prior to treatment of larger areas, the treated plants should be observed for any sign of herbicidal injury during 30 to 60 days of normal growing conditions to determine if the treatment is noninjurious to the target plant species. **The user assumes responsibility for any plant damage or other liability resulting from the use of this product on plant species not recommended on this label.**

WEEDS CONTROLLED OR SUPPRESSED BY THIS PRODUCT

Weeds controlled when this product is applied at a rate of 120-240 pounds per acre (2.75-5.50 pounds per 1000 sq. ft.)

Annual Grasses

Common Name

barley, little
barnyardgrass
bluegrass, annual
crabgrass
crowfootgrass
cupgrass, southwestern
foxtail
goosegrass
johnsongrass (seedling only)
jungle rice
lovegrass, Mexican
lovegrass, orcutt
oat, wild
panicum, browntop
panicum, fall
panicum, Texas
ryegrass, Italian
sandbur, field
signalgrass
sprangletop, red
witchgrass

Scientific Name

Hordeum pusillum
Echinochloa crus-galli
Poa annua
Digitaria spp.
Dactyloctenium aegyptium
Echinochloa gracilis
Setaria spp.
Eleusine indica
Sorghum halepense
Echinochloa colonum
Eragrostis mexicana
Eragrostis orcuttiana
Avena fatua
Panicum fasciculatum
Panicum dichotomiflorum
Panicum texanum
Lolium multiflorum
Cenchrus incertus
Bracharia spp.
Leptochloa filiformis
Panicum capillare

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Recommended
Treatment Method:
C = Container Grown
F = Field Grown

Broadleaf Weeds

Common Name

bittercress
carpetweed
chickweed, common
fiddleneck, coast
filaree, reostem
filaree, whitestem
groundsel, common
henbit
knotweed, prostrate
lambsquarters, common
pigweed
puncturevine
purslane, common
pusley, Florida

Scientific Name

Cardamine oligosperma
Mollugo verticillata
Stellaria media
Amsinckia intermedia
Erodium cicutarium
Erodium moschatum
Senecio vulgaris
Lamium amplexicaule
Polygonum aviculare
Chenopodium album
Amaranthus spp.
Tribulus terrestris
Portulaca oleracea
Richardia scabra

Common Name

rocket, London
rockpurslane, desert
shepherdspurge
spurge, prostrate
woodsorrel, yellow

Scientific Name

Sisymbrium irio
Calandrinia ciliata
Capsella bursa-pastoris
Euphorbia humistrata
Oxalis stricta

In addition to the weeds controlled, the following weeds will be partially controlled or suppressed at 120 - 240 pounds per acre (2.75 to 5.50 pounds per 1000 sq ft).

Common Name

horseweed
ladysthumb
lettuce, prickly
mallow, common
milkweed, climbing
morningglory
mustard, black
mustard, wild
nightshade, black
ragweed, common
smartweed
sowthistle, annual
spurge, spotted
teaweed (prickly sida)
velvetleaf
wheat, volunteer

Scientific Name

Conyza canadensis
Polygonum persicaria
Lactuca serriola
Malva neglecta
Sarcostemma cynanchoides
Ipomoea spp.
Brassica nigra
Brassica kaber
Solanum nigrum
Ambrosia artemisiifolia
Polygonum pennsylvanicum
Sonchus oleraceus
Euphorbia maculata
Sida spinosa
Abutilon theophrasti
Triticum spp.

This Product May Be Used On The Following Established Plant Species:
(Note limitations on recommended treatment methods.)

Trees

Scientific Name/Common Name

Abies balsamea
Balsam fir
Abies concolor
White fir
Abies fraseri
Fraser fir
Abies grandis
Grand fir
Abies lasiocarpa
Alpine fir
Abies veitchii
Veitch fir
Abutilon hybridum
Albus flowering maple
Luteus flowering maple
Roseus flowering maple
Tangerine flowering maple
Vesuvius red flowering maple
Acer spp.
maple
Arecastrum romanzoffianum
Queen palm
Betula papyrifera
Paper birch
Betula nigra
River birch
Betula pendula
White birch
Bucida buceras
Black olive

Recommended
Treatment Method:
C = Container Grown
F = Field Grown

F

F

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F

Scientific Name/Common Name

Ceratonia siliqua
Carob
Cercidium floridum
Blue palo verde
Cercis canadensis
Redbud
Chamaecyparis lawsoniana
Lawson falsecypress
Chamaecyparis obtusa spp.
Filicoides-fernspray cypress
Gracilis-slender Hinoki cypress
Chamaecyparis pisifera
Sawara-false cypress
Squarrosa-moss cypress
Chamaedorea cataractarum
Cat palm
Chamaedorea costaricana
Palm
Chamaedorea elegans
Parlor palm
Cornus florida
Flowering dogwood
Crupaniopsis anacardioides
Carrot wood
Cryptomeria japonica
Japanese cryptomeria
Cupressus glabra
Arizona cypress
Cupressus sempervirens
Italian cypress
Elaeagnus angustifolia
Russian olive
Eucalyptus cinerea
Mealy eucalyptus
Silver dollar eucalyptus
Eucalyptus camaldulensis
Red gum eucalyptus
Eucalyptus nicholii
Narrow-leaved eucalyptus
Eucalyptus sideroxylon
Red ironbark eucalyptus
Ficus benjamina
Ficus
Fraxinus spp.
Ash
Ginkgo biloba
Maidenhair tree
Gleditsia triacanthos
Honey locust
Heteromeles arbustiflora
Toyon
Juniperus virginiana
Eastern redcedar
Kalmia latifolia
Mountain laurel
Koeleruteria paniculata
goldenrain tree
Liquidambar styraciflua
American sweet gum
Magnolia grandiflora
Southern magnolia
Malus spp.
Crabapple
Morus alba
White mulberry
Olea europaea
Olive
Picea abies
Norway spruce
Picea engelmanni
Englemann spruce
Picea glauca
Conica-dwarf Alberta spruce
White spruce
Picea mariana
Black spruce
Picea pungens spp.
Glaucous-Colorado blue spruce
Hoopsii-Hoop's blue spruce
Koster-Koster blue spruce
Pinus spp.
Pine
Platanus occidentalis
American sycamore
Platanus racemosa
California sycamore

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Recommended
Treatment Method:
C = Container Grown
F = Field Grown

Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown	Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown
<i>Podocarpus</i> spp.		<i>Cleyera japonica</i>	
Podocarpus	F	Japanese cleyera	C, F
<i>Populus deltoides</i>		<i>Cotoneaster adpressus</i>	
Cottonwood	F	Praecox-early cotoneaster	F
<i>Prunus caroliniana</i>		<i>Cotoneaster apiculatus</i>	
Carolina laurelcherry	F	Granberry cotoneaster	C, F
<i>Prunus laurocerasus</i>		<i>Cotoneaster buxifolius</i>	
English laurelcherry	F	Brightbead cotoneaster	F
<i>Prunus mahaleb</i>		<i>Cotoneaster congestus</i>	
Mahaleb cherry	F	Pyrenees cotoneaster	F
<i>Prunus yedoensis</i>		<i>Cotoneaster dammeri</i>	
Yoshino flowering cherry	F	Bearberry cotoneaster	C, F
<i>Quercus</i> spp.		<i>Cotoneaster himalayana</i>	
Oak	C, F	Himalayan cotoneaster	F
<i>Salix babingtonii</i>		<i>Cotoneaster horizontalis</i>	
Babyion weeping willow	F	Rock cotoneaster	C, F
Corkscrew willow	F	<i>Cotoneaster lacteus</i>	
<i>Schinus molle</i>		Parney cotoneaster	C, F
California pepper tree	F	<i>Cotoneaster microphyllus</i>	
<i>Sequoiadendron giganteum</i>		Rockspray cotoneaster	F
Giant sequoia	F	<i>Cornus alba</i>	
<i>Sequoia sempervirens</i>		Sibirica-Siberian dogwood	F
Coast redwood	F	<i>Cornus florida</i>	
<i>Swietenia mahogany</i>		Flowering dogwood	F
Mahogany	F	<i>Cornus kousa</i>	
<i>Tabebuia caraiba</i>		Kousa dogwood	C, F
Yellow tab	F	<i>Cornus stolonifera</i>	
<i>Tilia cordata</i>		Flaviramea-yellowtwig dogwood	F
Littleleaf linden	C, F	<i>Cryptomeria japonica</i>	
<i>Thuja plicata</i>		Japanese cryptomeria	C, F
Western redcedar	F	<i>Cytisus praecox</i>	
<i>Ulmus parvifolia</i>		Holandia-warminster broom	F
Chinese Elm	F	<i>Cytisus scoparius</i>	
<i>Umbellularia californica</i>		Lena-Scotch broom	F
California laurel	F	<i>Dasyliiron wheeleri</i>	
<i>Washingtonia robusta</i>		Desert spoon solol	F
Mexican fan palm	F	<i>Deutzia crenata</i>	
		Nakiana dwarf deutzia	F
		<i>Dodonea viscosa</i>	
		Hopseed bush	F
		<i>Escallonia exoniensis</i>	
		Escallonia	C, F
		<i>Euonymus alata</i>	
		Winged euonymus	F
		<i>Euonymus fortunei</i>	
		Canadale gold euonymus	C, F
		Emerald'n gold euonymus	C, F
		Stringybark euonymus	C, F
		Wintercreeper	C, F
		<i>Euonymus japonica</i>	
		Evergreen euonymus	C, F
		Silver king euonymus	F
		<i>Euonymus kiautschovica</i>	
		Spreading euonymus	F
		<i>Fatsyhedera lizei</i>	
		Fatsyhedera	C, F
		<i>Forsythia intermedia</i>	
		Forsythia	F
		<i>Gardenia jasminoides</i>	
		Gardenia	C, F
		<i>Genista pilosa</i>	
		Woodwaxen	F
		<i>Hibiscus rosa-sinensis</i>	
		Chinese hibiscus	F
		Ross Estey hibiscus	F
		<i>Hibiscus syriacus</i>	
		Rose of Sharon, Red Bird	F
		Rose of Sharon, Red Heart	F
		Rose of Sharon, Woodbridge	F
		<i>Hypericum</i> spp.	
		St. Johnswort	F
		<i>Ilex aquifolium</i>	
		Balkan holly	F
		English holly	F
		Gold coast holly	F
		<i>Ilex aquipernyi</i>	
		San Jose holly	C, F
		<i>Ilex cornuta</i>	
		Chinese holly	C, F
		Dwarf burford holly	C, F
		<i>Ilex crenata</i>	
		Convexa holly	C, F
		Compacta-dwarf Japanese holly	C, F
		Helleri-Heller's Japanese holly	C, F
		Japanese holly	C, F
		<i>Ilex glabra</i>	
		Nordica-inkberry holly	F

Ornamental Shrubs

<i>Abelia grandiflora</i>	
Glossy abelia	F
<i>Acacia redolens</i>	
Prostrate acacia	F
<i>Agave americana</i>	
Century plant	F
<i>Agave macroculmis</i>	
Agave	F
<i>Arctostaphylos stanfordiana</i>	
Stanford manzanita	F
<i>Astilbe chinensis</i>	
False spirea	C, F
<i>Baccharis pilularis</i>	
Coyotebush	F
<i>Berberis thunbergii</i>	
Atropurea-Redleaf Japanese barberry	C, F
Aurea golden Japanese barberry	C, F
Crimson pygmy barberry	C, F
<i>Bougainvillea</i> spp.	
Barbara Karst	F
California Gold	F
Scarlet O'Hara	F
Texas Dawn	F
<i>Buxus microphylla</i>	
Japonica-Japanese boxwood	C, F
Littleleaf boxwood	F
<i>Buxus sempervirens</i>	
Common boxwood	C, F
<i>Callistemon citrinus</i>	
Lemon bottlebrush	C, F
<i>Ceanothus</i> spp.	
Wild lilac	C, F
<i>Chamaecyparis obtusa</i> spp.	
Kosteri cypress	F
Nana-dwarf Hinoki cypress	F
Torulosa cypress	F
<i>Chamaecyparis pisifera</i>	
Filifera-thread cypress	F
Squarrosa minima-dwarf moss cypress	F
<i>Chrysalidocarpus lutescens</i>	
Areca palm	F

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EPA REG. NO. 34704-823

Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown	Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown
<i>Arbutus menziesii</i>		<i>Platycladus orientalis</i>	
Blue girl holly	F	Oriental arborvitae	C, F
Blue boy holly	F	<i>Plumbago ariculata</i>	
Ebony magic holly	F	Blue cape plumbago	F
<i>Chamaecyparis vomitoria</i>		<i>Podocarpus macrophyllus</i>	
Nana-dwarf yaupon holly	C, F	Yewpine	C, F
Pendula-weeping yaupon holly	C, F	<i>Potentilla fragiformis</i>	
Yaupon holly	C, F	Cinquefoil	F
<i>Juniperus</i> spp.		<i>Potentilla fruticosa</i>	
Juniper	C, F	Cinquefoil	C, F
<i>Justicia brandegeana</i>		<i>Protea neriifolia</i>	
Shrimp plant	C, F	Protea	F
<i>Justicia spicigera</i>		<i>Pyracantha coccinea</i>	
Mexican honeysuckle	F	Scarlet lothorn	C, F
<i>Lagerstroemia indica</i>		<i>Pyracantha fortuneana</i>	
Grape myrtle	C, F	Lalendel Monrovia pyracantha	C, F
<i>Leucothoe axillaris</i>		Monon pyracantha	C, F
Coast leucothoe	F	Red elf hybrid pyracantha	C, F
<i>Leucothoe fontanesiana</i>		Rutgers hybrid pyracantha	C, F
Drooping leucothoe	F	Santa Cruz pyracantha	C, F
<i>Ligustrum amurense</i>		Victory pyracantha	C, F
Amur privet	C, F	<i>Pyracantha skoldzumi</i>	
<i>Ligustrum japonicum</i>		Formosa firethorn	C, F
Japanese privet	C, F	<i>Raphiolepis indica</i>	
Yellow tip ligustrum	C, F	Enchantress-Moness raphiolepis	F
<i>Ligustrum texanum</i>		India hawthorn	C, F
Wax leaf privet	F	Springtime-Monme raphiolepis	F
Howardi privet	F	<i>Raphiolepis ovata</i>	
<i>Ligustrum lucidum</i>		Round-leaf raphiolepis	F
Glossy privet	C, F	<i>Rhipsalidopsis gaetneri</i>	
<i>Ligustrum ovalifolium</i>		Easter cactus	C, F
California privet	F	<i>Rhododendron</i> spp.	
<i>Ligustrum vicaryi</i>		Azalea	C, F
Vicary golden privet	C, F	Rhododendron	C, F
<i>Livistona chinensis</i>		<i>Rhus lancea</i>	
Chinese fountain palm	F	African sumac	C, F
<i>Lonicera fragrantissima</i>		<i>Rosa rugosa</i>	
Winter honeysuckle	F	Ramanas rose	F
<i>Lonicera periclymenum</i>		<i>Rosmarinus officinalis</i>	
Flowering woodbine	F	Rosemary	F
Serotina woodbine	F	<i>Spiraea vanhouttei</i>	
<i>Lonicera sempervirens</i>		Bridal wreath	F
Trumpet honeysuckle	F	<i>Syringa vulgaris</i>	
<i>Mahonia aquifolium</i>		Common lilac	F
Oregon grape	F	<i>Syzygium paniculata</i>	
<i>Myoporum parvifolium</i>		Brush cherry	C, F
Prostrate myoporum	F	<i>Taxus cuspidata</i>	
<i>Myrtus communis</i>		Japanese yew	F
True myrtle	C, F	<i>Taxus media</i>	
<i>Nandina domestica</i>		Yew	F
Compacta-dwarf heavenly bamboo	C, F	<i>Thuja occidentalis</i>	
Harbour-dwarf heavenly bamboo	C, F	American arborvitae	F
Heavenly bamboo	C, F	Emerald arborvitae	F
Nana compacta-heavenly bamboo	C, F	Globosa-globe arborvitae	F
Nana purpurea-heavenly bamboo	C, F	Little Giant-dwarf arborvitae	F
Woods-dwarf heavenly bamboo	C, F	Nigra-dark American arborvitae	F
<i>Nerium oleander</i>		Pyramidalis arborvitae	F
Hardy red oleander	C, F	Rheingold arborvitae	F
Oleander	C, F	Woodwardii arborvitae	F
Ruby lace oleander	C, F	<i>Thuja orientalis</i>	
<i>Osmanthus heterophyllus</i>		Aurea nana-dwarf golden arborvitae	F
Holly-leaf osmanthus	F	Minima glauca-dwarf arborvitae	F
<i>Pachysandra terminalis</i>		<i>Trachelospermum jasminoides</i>	
Japanese spurge	F	Chinese star jasmine	F
<i>Philadelphus</i> spp.		<i>Veitchia menlii</i>	
Mockorange	C, F	Christmas palm	F
<i>Phoenix roebelenii</i>		<i>Viburnum davidii</i>	
Pygmy date palm	F	David viburnum	F
<i>Photinia fraseri</i>		<i>Viburnum japonicum</i>	
Fraser's photinia	C, F	Viburnum	F
<i>Picea abies</i>		<i>Viburnum opulus sterile</i>	
Repens-spreading Norway spruce	F	Eastern snowball viburnum	F
Pendula-weeping Norway spruce	F	<i>Viburnum plicatum tomentosum</i>	
<i>Peris japonica</i>		Doublefile viburnum	F
Andromeda	C, F	<i>Viburnum x pragnense</i>	
Lily-of-the-valley	F	Viburnum	F
Snowdrift	F	<i>Viburnum setigerum</i>	
Temple bells lily-of-the-valley	F	Tea viburnum	F
Valley rose lily-of-the-valley	F	<i>Viburnum suspensum</i>	
<i>Pittosporum</i> spp.		Sandankwa viburnum	F
Pittosporum	C, F	<i>Viburnum tinus</i>	
		Compactum-spring bouquet viburnum	F
		Laurastinus viburnum	C, F
		<i>Viburnum trilobum</i>	
		Compactum-dwarf cranberry bush	F

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Established Flowers

Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown
<i>Weigela florida</i>	
Java red weigela	F
Bristol ruby weigela	F
Minuet weigela	F
<i>Xylosma congestum</i>	
Xylosma	F
<i>Yucca elata</i>	
Soap tree yucca	C, F
<i>Yucca recurvifolia</i>	
Pendulous yucca	F

Ground Covers

<i>Agapanthus africanus</i>	
Lily-of-the-Nile	C, F
<i>Ajuga</i> spp.	
Carpet bugle	F
<i>Arctotheca calendula</i>	
Cape weed	F
<i>Campanula elatines</i>	
Bellflower	C, F
<i>Carpobrotus edulis</i>	
Largeleaf iceplant	F
<i>Clytostoma callistegioides</i>	
Violet trumpet vine	C, F
<i>Cortaderia selloana</i>	
Pampas grass	F
<i>Delosperma alba</i>	
White iceplant	F
<i>Drosanthemum floribundum</i>	
Trailing rosea iceplant	F
<i>Festuca ovina</i>	
Blue fescue	F
<i>Gazania</i> spp.	
Gazania	F
<i>Hedera canariensis</i>	
Algerian ivy	F
<i>Hedera helix</i>	
English ivy	F
<i>Hemerocallis</i> spp.	
Day lily	C, F
<i>Hosta</i> spp.	
Plantain lily	C, F
<i>Hypericum</i> spp.	
St. Johnswort	F
<i>Lampranthus spectabilis</i>	
Red trailing iceplant	F
<i>Liriope gigantea</i>	
White lily turf	F
<i>Liriope muscari</i>	
Big blue lily turf	C, F
Lilac beauty lily turf	C, F
Majestic lily turf	C, F
Monroe white lily turf	C, F
Silvery sunproof lily turf	C, F
Variegated liriope lily turf	C, F
<i>Lonicera japonica</i>	
Japanese honeysuckle	F
<i>Mesembryanthemum crystallinum</i>	
Ice plant	F
<i>Ophiopogon japonicus</i>	
Mondo grass	F
<i>Osteospermum fruticosum</i>	
Trailing African daisy	F
<i>Sedum brevifolium</i>	
Stonecrop	F
<i>Trachelospermum jasminoides</i>	
Chinese star jasmine	F
<i>Vinca major</i>	
Bigleaf periwinkle	F
<i>Vinca minor</i>	
Dwarf periwinkle	F

Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown
<i>Achillea</i> spp.	
Yarrow	F
<i>Antirrhinum majus</i>	
Snapdragon	F
<i>Caladium bicolor</i>	
Fancy-leaved caladium	F
<i>Chrysanthemum coccineum</i>	
Painted daisy	F
<i>Chrysanthemum maximum</i>	
Shasta daisy	F
<i>Chrysanthemum montifolium</i>	
Chrysanthemum	F
<i>Coreopsis lanceolata</i>	
Coreopsis	F
<i>Dianthus barbatus</i>	
Sweet william	F
<i>Dicentra spectabilis</i>	
Bleeding heart	C, F
<i>Dimorphotheca</i> spp.	
Cape marigold	F
<i>Echinacea purpurea</i>	
Purple coneflower	F
<i>Geum quellyon</i>	
Geum	F
<i>Gladiolus hortulanus</i>	
Gladiolus	F
<i>Gypsophila paniculata</i>	
Baby's breath	F
<i>Impatiens wallerana</i>	
Impatiens	F
<i>Iris</i> spp.	
Bearded iris	F
<i>Liatris spicata</i>	
Blazing star	C, F
<i>Pelargonium hortorum</i>	
Geranium	F
<i>Pelunia</i> spp.	
Petunia	F
<i>Portulaca grandiflora</i>	
Rose moss	F
<i>Ranunculus asiaticus</i>	
Persian ranunculus	F
<i>Rosa</i> spp.	
Rose	F
<i>Rudbeckia hirta</i>	
Gloriosa daisy/black-eyed susan	F
<i>Salvia</i> spp.	
Sage	F
<i>Stokesia laevis</i>	
Stokes aster	F
<i>Strelitzia reginae</i>	
Bird of paradise	F
<i>Tagetes</i> spp.	
Marigold	F
<i>Viola wittrockiana</i>	
Pansy	F
<i>Zinnia elegans</i>	
Common zinnia	F

Ornamental Bulbs

Special Use Precautions

Do not apply to tulip plants that have emerged to a height greater than ¾ inch. Deep till prior to planting any crop after this use.

Do not apply to gladioli prior to emergence or to plants less than one inch in diameter.

Application Rates, Frequency, and Timing of Applications

This product may be applied for annual weed control in ornamental bulbs such as bulbous iris, daffodil (*narcissus*), hyacinth, and tulip. Apply this product to the soil surface two (2) to four (4) weeks after planting and final hilling but prior to the emergence of annual weeds. This product may also be applied following bulb emergence. For fall-planted bulbs, apply this product again in late winter or early spring to weed-free soil surfaces.

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Broadcast Application Rates

Time of Application	Soil Texture	This Product	
		pounds/acre	pounds/1000 sq ft
Fall	Coarse	45	1.00
Fall	Medium and Fine	90	2.00
Feb. - March	All	45	1.00

Non-bearing Fruit and Nut Trees and Non-bearing Vineyards†

Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown
Almond	F
Apple	F
Apricot	F
Avocado	F
Blackberry	F
Blueberry	F
Boysenberry	F
Cherry, sour	F
Cherry, sweet	F
Currant	F
Dewberry	F
Elderberry	F
Fig	F
Filbert	F
Gooseberry	F
Grape, American	F
Grape, European	F
Grapefruit	F
Kiwi	F
Kumquat	C, F
Lemon	F
Loganberry	F
Macadamia nut	F
Nectarine	F
Olive	F
Orange	C, F
Peach	F
Pear	F
Pecan	C, F
Pistachio	F
Plum	F
Pomegranate	F
Prune	F
Raspberry	F
Walnut, black	F
Walnut, English	F

† Non-bearing fruit and nut trees and non-bearing vineyards are defined as plants which will not bear fruit for at least one year after treatment.

Christmas Tree Plantations

Apply this product to established plantings of labeled field grown Christmas tree species prior to germination of target weeds. Do not apply to Douglas-fir (*Pseudotsuga menziesii*) or Eastern hemlock (*Tsuga canadensis*). Do not apply to seedbeds or seedling transplant beds. Apply only to established plantings. Established plants are defined as those that have been transplanted into their final growing location for a sufficient period of time to allow the soil to be firmly settled around the roots from packing and rainfall or irrigation.

Note: Refer to the "General Information" section of this label for general use precautions and information on application. Refer to "Approved Uses" section of this label for special use precautions and information on application rates and weeds controlled.

NONCROPLAND AREAS: INDUSTRIAL SITES, UTILITY SUBSTATIONS, HIGHWAY GUARDRAILS, SIGN POSTS, AND DELINEATORS

This product is recommended as a preemergence treatment for control of certain annual grasses and broadleaf weeds on industrial sites, utility substations, highway guardrails, sign posts, and delineators. Apply this product prior to germination of target weeds. Areas to be treated should be free of established weeds or existing weeds should be controlled with postemergence herbicides.

Note: Refer to the "General Information" section of this label for general use precautions and information on application. Refer to "Approved Uses" section of this label for special use precautions and information on application rates and weeds controlled.

WARM SEASON TURGRASSES

This product may be applied as a preemergence treatment for control of annual grasses and certain broadleaf weeds in established warm season turf including bahiagrass, bermudagrass, buffalograss, centipedegrass, St. Augustinegrass and zoysiagrass or established tall fescue growing in warm season areas. Established turf is defined as a dense turf having a well-anchored root system and healthy, vigorous top growth.

Successful preemergence control of weeds listed on this label requires that this product be applied prior to weed germination and be activated by at least one-half (½) inch rainfall or irrigation within 21 days of application.

SPECIAL USE PRECAUTIONS:

To avoid possible injury, do not apply this product to:

- Cool season turfgrass species other than tall fescue.
- Lawns containing dichondra or cool season turfgrass species.
- Golf course putting greens or tees.
- Turfgrass in the spring that was planted the previous fall.
- Newly sprigged or sodded areas of bermudagrass, St. Augustinegrass, centipedegrass, zoysiagrass or tall fescue until these turfs are well-established and have well-anchored root systems.
- Newly hydromulched areas of bermudagrass until such areas are well-established.

This product will not control emerged weeds.

This product may injure turf that is not well-established or is stressed or weakened due to unfavorable winter climatic conditions, drought, nematodes, or other factors which damage or weaken turf root systems.

Apply this product only to healthy, well-established turf that has a well-anchored root system.

Do not apply this product in the spring or early summer to tall fescue turfgrass reseeded the previous fall. In such cases, apply Balan® 2.5G granular herbicide at 80 to 80 pounds per acre in early summer (Round 1) and this product at 100 pounds per acre approximately eight weeks later (Round 2).

This product may thin established annual bluegrass (*Poa annua*) at rates above 100 pounds per acre.

In bermudagrass areas that have been overseeded with winter grasses, a spring application of this product will thin the overseeded grasses.

WEEDS CONTROLLED OR SUPPRESSED

Weeds controlled by this product when applied at 100 to 150 lb/acre (2.3 to 3.4 lb/1000 sq ft)

Annual Grasses

Common Name	Scientific Name
barnyardgrass	<i>Echinochloa crus-galli</i>
crabgrass	<i>Digitaria</i> spp.
crowfoot grass	<i>Dactyloctenium aegyptium</i>
foxtail	<i>Setaria</i> spp.
goosegrass	<i>Eleusine indica</i>
johnsongrass (seedling only)	<i>Sorghum halepense</i>
ryegrass, Italian	<i>Lolium multiflorum</i>
sandbur, field	<i>Cenchrus incertus</i>

Common Name	Scientific Name
bluegrass, annual	<i>Poa annua</i>

Broadleaf Weeds

Common Name	Scientific Name
carpetweed	<i>Mollugo verticillata</i>
knotweed, prostrate	<i>Polygonum aviculare</i>
purslane, common	<i>Portulaca oleracea</i>

Common Name	Scientific Name
chickweed, common	<i>Stellaria media</i>
henbit	<i>Lamium amplexicaule</i>

In addition to the weeds controlled, the following weeds will be partially controlled or suppressed at 100 to 150 lb/acre (2.3 to 3.4 lb/1000 sq ft).

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Common Name
carrot, wild
ileabane, dwarf
groundsel, common
mustard, Indian
spurge, prostrate
woodsorrel, yellow

Scientific Name
Daucus carota
Coryza ramosissima
Senecio vulgaris
Brassica juncea
Euphorbia humistrata
Oxalis stricta

APPLICATION RATES, FREQUENCY AND TIMING OF APPLICATIONS

This product can be applied in the spring for summer annual grass and broadleaf weed control, and in the fall for annual bluegrass (*Poa annua*) and winter annual broadleaf weed control.

1. SUMMER ANNUAL GRASSES AND BROADLEAF WEEDS

Single Application Program: Apply 100 to 150 pounds per acre of this product in late winter or early spring, prior to the onset of conditions favorable for summer annual weed germination.

Split Application Program: As an alternative to a single application program, this product may be applied in a split application. This program is desirable when the initial application is made well in advance of weed germination and where weed control is desired for a longer period of time. Apply 100 pounds per acre of this product in an initial application, followed by a second application of 100 pounds per acre 8 to 10 weeks later.

The second treatment of the split application may follow application of a different preemergence grass herbicide in place of the initial application.

2. ANNUAL BLUEGRASS AND WINTER ANNUAL BROADLEAF WEEDS

Apply this product as a preemergence treatment in late summer or early fall, prior to the expected germination period for annual bluegrass and winter annual broadleaf weeds. Do not apply this product to areas where fall overseeding will occur. If annual bluegrass infestation is severe and its elimination will result in thinning of turfgrass cover, apply this product at 100 pounds per acre. If thinning of turfgrass cover is not a potential problem, this product may be applied 150 pounds per acre.

In areas of heavy annual bluegrass infestation, its elimination will result in temporary thinning of turfgrass cover. Proper fertilization, irrigation and soil incorporated reseeding should be employed to speed the restoration of desirable turfgrass cover in areas previously occupied by annual bluegrass (see section on reseeding).

WEED CONTROL IN FLORIDA

In Florida, apply 150 pounds per acre of this product three times per year, or every 90 to 100 days, in the fall, early spring, and early summer. Do not apply more than 150 pounds per acre of this product in any single application.

BROADCAST APPLICATION RATES	
Pounds per acre	Pounds per 1000 sq ft
100	2.3
150	3.4

APPLICATION DIRECTIONS

Apply this product evenly over the turfgrass area. Avoid spray pattern skips and overlaps that may result in incomplete coverage or over-application. For best results use application equipment designed to uniformly broadcast granular herbicides. More uniform application may be achieved by spreading half the required amount of product over the area and then applying the remaining half in swaths at right angles to the first application. Calibrate application equipment prior to use, according to manufacturer's directions. Check equipment frequently to make sure it is working properly and distributing granules uniformly.

RESEEDING

Herbicides that control annual weeds may also affect establishment of desirable turfgrass seedlings. Reseeding should be delayed for at least 6 weeks following application of this product at the 100 pound per acre rate. When using this product at the 150 pound per acre rate, reseeding should be delayed 12 to 16 weeks after application. When reseeding, it is essential that proper cultural practices such as soil cultivation and seedbed preparation, irrigation and fertilization be followed. For satisfactory reseeding results following this product's use, the seeding rate should be increased and equipment designed to place seed in full contact with soil (such as the Rogers Aero Seeder) should be employed.

SPREADER SETTINGS

(A guide for calibrating spreaders to apply this product in one pass over turf.)

Note: These settings are provided as suggested starting points in calibrating each individual spreader. Since no two spreaders are alike, these settings are intended only as a guide in beginning the calibration process.

Spreader Type	Estimated Spreader Setting Necessary to Apply the Specified Rate of this Product Per Acre in One Pass	
	100 lb/acre	150 lb/acre
Cyclone:		
Models B1, 33, 96, BSSB		
at 200 ft/min	3 1/4	3 1/4
Model 100 at 200 ft/min	3 1/4	3 1/2
Model 93 (based on tractor speed of 4 mph)	5	6 1/4
Model 99 (based on tractor speed of 4 mph)	4 3/4	5 3/4-6
Model BPI (based on tractor speed of 4 mph)	4 1/2	5 1/4-5 1/2
Gandy:		
Model 10A series, 6, 8, 10,		
11, 12, 20 and 30 ft (based on tractor speed of 5 mph)	31	37
Model 10T series, 6, 8, 10,		
11, 12, 20 and 30 ft (based on tractor speed of 5 mph)	33	40
Turf Tender, 24, 30, 42 inch (based on tractor speed of 3 mph)	25	28
600 Series, 2, 4 and 5 ft (based on tractor speed of 3 mph)	18	22
Lely:		
Model W and H (based on tractor speed of 4.5 mph)	3	4
Lesco:		
Lesco Spreader (Note: set 3rd adjustable hole 1 notch from "open")	D 1/2	F
Scott:		
Rotary Model R-8	H 1/2	I 1/4
Drop Spreader	3 7/8	4 5/8
Spyker:		
Model 402 (with seed ring) swath width 20 ft, 5 mph speed	24	28
Warren:		
Model T-7II (based on ground speed of 3.0 mph)	3 1/4	4

NOTICE

IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS INHERENTLY ASSOCIATED WITH THE USE OF THIS PRODUCT. CROP INJURY, INEFFECTIVENESS, OR OTHER UNINTENDED CONSEQUENCES MAY RESULT BECAUSE OF SUCH FACTORS AS WEATHER CONDITIONS, PRESENCE OF OTHER MATERIALS, OR THE MANNER OF USE OR APPLICATION, ALL OF WHICH ARE BEYOND THE CONTROL OF PLATTE, THE MANUFACTURER OR SELLER. IN NO CASE SHALL PLATTE, THE MANUFACTURER OR SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER.

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PLATTE CHEMICAL CO.
419 18TH STREET, GREELEY, COLORADO 80631-5852