

QUALI-PRO

FLUMIOXAZIN GROUP 14 HERBICIDE

FLUMISHIELD G

Provides preemergence weed control in:

- Landscape grown ornamental shrubs, trees, christmas trees, ground covers, non-bearing fruit and nut trees, vines, and bare ground non-crop areas
- Established turfgrass

ACTIVE INGREDIENT:

Flumioxazin **0.125%**

OTHER INGREDIENTS: **99.875%**

TOTAL: **100.000%**

*2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-

4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione

Contains 2.5 lbs. flumioxazin per ton.

EPA Reg. No.: 53883-553

EPA Est. No.: 48234-GA-001



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**KEEP OUT OF
REACH OF CHILDREN
CAUTION**

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.)



Manufactured for:
Control Solutions Inc.
5903 Genoa-Red Bluff
Pasadena, Texas 77507

NET CONTENTS: 50 POUNDS

FIRST AID

IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to do so by the poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	• 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 IN EYES:	• 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 INHALED:	• 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 SafetyCall® (866) 897-8050 for emergency medical treatment information.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed. Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material, shoes, and socks. Wear appropriate protective eye wear such as goggles, face shield, or safety glasses.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates. **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** apply where runoff is likely to occur. **DO NOT** apply when weather conditions favor drift from treated areas. **DO NOT** contaminate water when disposing of equipment washwaters or rinsate.

NON-TARGET ORGANISM ADVISORY: This pesticide is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize off-target movement.

Under some conditions this product may have a potential to runoff to surface water or adjacent land. Where possible, use methods which reduce soil erosion, including no till, limited till and contour plowing; these methods also reduce pesticide runoff. Use of vegetation filter strips along rivers, creeks, streams, wetlands or on the downhill side of fields where runoff could occur will minimize water runoff is advised.

DIRECTIONS FOR USE

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

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 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 12 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, including plants, soil, or water, is: coveralls, chemical-resistant gloves made of any waterproof material, 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 Standards for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forest, nurseries, or greenhouses.

Keep all unprotected persons out of operating areas, or vicinity where there may be drift.

DO NOT enter or allow others to enter treated areas until dust has settled.

RESISTANCE MANAGEMENT

For resistance management, this product is a Group 14 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 14 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

Rotate the use of this product or other Group 14 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.

Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.

Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.

Fields should be scouted prior to application to identify the weed species present and their growth stage to determine if the intended application will be effective. Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.

If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.

Contact your local extension specialist or certified crop advisors for additional pesticide resistance management and/or integrated weed-management strategies for specific crops and weed biotypes.

For further information or to report suspected resistance, contact Control Solutions, Inc at 800-242-5562.

PRODUCT INFORMATION

This product is a selective preemergence herbicide that provides extended residual control of a wide variety of annual broadleaf and grassy weeds. This product controls weeds by inhibiting protoporphyrinogen oxidase, an essential enzyme required by plants for chlorophyll biosynthesis. Seedling weeds are controlled preemergence when exposed to sunlight following contact with the soil applied herbicide. This herbicide has limited postemergent activity against newly germinated seedlings of some weed species, but to ensure optimal control, apply before weed germination.

Most hardy woody ornamental shrubs, trees, ground covers and established turfgrass are not susceptible to this product, so long as the product is applied in accordance with the label. Use caution when applying to plants that are producing a new flush of growth because herbicide may injure tender, newly formed leaves if granules remain in contact with leaf surfaces. This product may cause leaf spotting on some species if granules remain in contact with leaf surfaces, especially on new flush or on foliage that is wet at the time of application. However, subsequent plant growth is generally unaffected. This product may injure some species if not applied in accordance with the label and may also injure ornamental species that are not listed on the label. Therefore, read all label precautions and restrictions before applying this product.

Restrictions and Limitations

- **DO NOT** apply more than 300 lb. (0.375 lb. ai) per acre in a single application.
- **DO NOT** apply more than 600 lb. (0.75 lb. ai) per acre per year. **DO NOT** apply more than 2 applications at 300 lb. (0.375 lb. ai) per acre or more than 3 applications at 200 lb. (0.25 lb. ai) per acre per year.
- **DO NOT** treat the same site more than one time every 8 weeks.
- **DO NOT** apply by air.
- **DO NOT** apply when winds are gusty or above 10 mph.
- **DO NOT** graze or feed livestock forage cut from treated areas.

Preemergence Application

This product provides effective preemergence control of weeds listed in Table 4. For optimal preemergence control, apply this product to clean, weed free soil or mulch before weed seeds germinate. Disturbing soil surfaces after application may reduce herbicide efficacy. Approximately 1/2 to 3/4 inch of rainfall, overhead sprinkler irrigation or hand irrigation is required to activate this product. Inadequate irrigation or rainfall following application may reduce effectiveness of this product. Weed control is most persistent under cooler temperatures.

Application Instructions

Apply this product with clean, well maintained granular application equipment. Calibrate application equipment prior to use according to manufacturer's guidelines. Check frequently to be sure equipment is working properly and distributing granules uniformly. Avoid skips and overlaps, as poor weed control or crop injury may occur.

- When applying to ornamentals, apply to dry foliage. To test for moisture, rub hands over plant foliage.
- When applying to turfgrass, ensure leaf surfaces are mostly dry.
- When possible, irrigate with 1/2 to 3/4 inch of water to activate the herbicide.
- If granules remain on foliage following application, lightly brushing or blowing plants will reduce the potential for plant injury.

Drift Management

DO NOT apply under circumstances where possible drift to unprotected persons or to food, forage or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption can occur.

- Make applications when the wind velocity favors on-target product deposition. Apply only when the wind speed is less than or equal to 10 mph. For all applications, wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.
- All application equipment must be properly maintained and calibrated using appropriate carriers.

CALIBRATION OF HERBICIDE APPLICATION EQUIPMENT

This product is a very active herbicide and can injure some plants if applied at excessive rates. The user is responsible for accurately calibrating herbicide application equipment so that this product is applied at the labeled rate of 200 to 300 lbs. (0.25-0.375 lbs. ai/A) per acre. The user assumes responsibility for any plant damage or other liability resulting from application of this product at excessive rates.

Table 1. Use Rate Table

Rate	
Pounds/Acre	Pounds/1,000 sq. ft.
200 (0.25 lb. ai/A)	4.6 (0.00575 lb. ai/1000 sq. ft.)
300 (0.375 lb. ai/A)	6.9 (0.00863 lb. ai/1000 sq. ft.)

ORNAMENTAL PLANT INFORMATION

Most established woody ornamental plants are not susceptible to this product when the product is applied according to the label. Prior to applying on a commercial scale, test a small number of plants grown under similar growing conditions to ensure crop safety. Ensure that test plants are actively growing at the time of application and examined for 4 to 8 weeks for symptoms of plant injury. If test plants are dormant at the time of application, or enter dormancy within 8 weeks after application, continue the injury evaluation until after plants break dormancy in the spring.

Mild leaf spotting is the most common symptom of injury on ornamental plants, and usually appears within 2 to 4 days after application. Leaf spotting is most likely to occur when this product is applied to new flush that is wet at time of application. To minimize the risk of leaf spotting, completely read and follow the Application Instructions section of the label.

Treatment of Ornamental Plant Species Labeled as Sensitive

This product can cause significant injury to ornamental plants listed in Table 3. **The user assumes responsibility for any plant damage that results from an application to plants listed as sensitive.**

Treatment of Ornamental Plant Species NOT Listed on Table 4

Prior to applying this product on non-listed species, test a small number of plants grown under similar growing conditions to ensure crop safety. **The user assumes responsibility for any plant damage that results from an application to non-listed plant species.**

Treatment of Ornamental Plant Species with Wet Foliage

When this product is applied to dry plants, most granules will bounce or roll off the foliage before releasing herbicide residues. However, if this product is applied to plants that are wet from dew, irrigation water or rainfall, some granules may stick to foliage and release herbicide residues. Herbicide release onto wet foliage can injure some plant species.

Treatment of Recently Transplanted Liners

Under certain conditions, this product can cause significant injury to recently transplanted liners of some plant species that are not significant when more

established (i.e. have formed a well-developed root system). Injury to recently transplanted liners is most likely when applied to smaller liners (less than one-gallon container size), is applied at above labeled rates, and is applied before potting media or soil has been settled by irrigation or rainfall. Therefore, **DO NOT apply to recently transplanted liners with root balls less than 4 inches in diameter until plants have been actively growing for at least 6 weeks after transplanting and have established a vigorous root system.**

Treatment of Herbaceous Plants, Tropical Shrubs and Foliage Plants

This product may severely injure many annual bedding plants (e.g. Petunia), and some herbaceous perennials (e.g. Hosta), tropical shrubs and foliage plants. Therefore, **DO NOT** apply this product over-the-top of herbaceous annual bedding plants, herbaceous perennials, tropical shrubs or foliage plants until after the user has confirmed the product's safety on a small number of plants grown under standard growing conditions.

Treatment of Seedling Trees and Shrubs

This product may injure seedlings of some trees and shrubs if applied before seedlings have established a vigorous root system. Therefore, **DO NOT** apply to tree and shrub seedlings within one year after germination, unless the user has first confirmed the product's safety on a small number of plants grown under standard growing conditions.

DIRECTIONS FOR USE IN LANDSCAPE GROWN ORNAMENTAL SHRUBS, TREES, CHRISTMAS TREES, GROUND COVERS, NON-BEARING FRUIT AND NUT TREES, VINES, AND BARE GROUND NON-CROP AREAS

In residential and commercial landscapes, this product must only be applied by commercial licensed applicators. This product applied at 200 to 300 lbs per acre (0.25 to 0.375 lb ai/A) (4.6 to 6.9 lbs per 1,000 sq ft) is an effective treatment for control of the weeds listed in Table 2 when applied to established landscape grown shrubs, trees, Christmas trees, ground covers, non-bearing fruit and nut trees and vines. Non-bearing fruit and nut trees including citrus, apples, pears, peaches, etc. are defined as plants that will not bear fruit for at least one year after application. This product may also be applied to maintain bare ground in non-crop areas in apartment complexes, gravel surfaces, ground mats, golf courses, office complexes, parks, parking areas, recreational sites, schools, sidewalks and other similar sites.

Precautions for Landscape Applications

This product can cause contact injury to foliage of landscape ornamentals if applied over-the-top of new flush, and especially if foliage is wet. To minimize crop injury potential, apply to dormant or non-actively growing landscape plants and avoid application to new flush.

Restrictions for Landscape Applications

- **DO NOT** apply more than 300 lb (0.375 lb. ai) per acre in a single application.
- **DO NOT** apply more than 600 lb (0.75 lb. ai) per acre per year.
- **DO NOT** treat the same plants more than one time every 8 weeks.
- **DO NOT** apply more than 2 applications at 300 lb. (0.375 lb. ai) per acre or more than 3 applications at 200 lb. (0.25 lb. ai) per acre per year.
- **DO NOT** apply to foliage that is wet due to rainfall, irrigation or dew.
- **DO NOT** apply over-the-top of ornamental plants not listed on this label until susceptibility is evaluated on a small number of plants grown under standard growing conditions.
- **DO NOT** apply to plants that are under moisture stress or stress from insects, diseases, animals, winter injury, planting shock or any other stresses.
- **DO NOT** apply to plants grown from seed until at least one year after seed germination, unless a product safety test is first conducted on a small number of plants.
- **DO NOT** apply to plants whose leaves channel the herbicide granules to the leaf base.
- **DO NOT** apply to herbaceous bedding plants or areas where bedding plants will be planted or transplanted within 3 months following application.
- **DO NOT** apply to plants while in propagation.
- **DO NOT** apply to liners that are in pots less than 4 inches in diameter.
- **DO NOT** apply to recently transplanted liners with root balls that are less than 4" in diameter until liners have been actively growing for at least 6 weeks after transplanting and have established a vigorous root system.
- **DO NOT** incorporate product into soil or potting media.
- **DO NOT** apply in an enclosed greenhouse structure.
- **DO NOT** graze or feed livestock forage cut from treated areas.

WEEDS CONTROLLED

When applied at 200 to 300 lbs. per acre (0.25 – 0.375 lbs. ai/A) before weeds germinate, this product will provide good to excellent preemergence control of the following grass and broadleaf weeds.

Table 2. WEEDS CONTROLLED

COMMON NAME	SCIENTIFIC NAME
Alyssum, Hoary	<i>Berteroa incana</i>
Amaranth	
Palmer	<i>Amaranthus palmeri</i>
Spiny	<i>Amaranthus spinosus</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>
Beggarweed, Florida	<i>Desmodium tortuosum</i>
Bittercress, Hairy	<i>Cardamine hirsute</i>
Bluegrass, Annual	<i>Poa annua</i>
Burclover, California	<i>Medicago polymorpha</i>
Carpetweed	<i>Mollugo verticillate</i>
Chickweed	
Common	<i>Stellaria media</i>
Mouseear	<i>Cerastium vulgatum</i>
Crabgrass	
Large	<i>Digitaria sanguinalis</i>
Smooth	<i>Digitaria ischaemum</i>
Southern	<i>Digitaria ciliaris</i>
Croton, Tropic	<i>Croton glandulosus var septentrionalis</i>
Dandelion	<i>Taraxacum officinale</i>
Dayflower, Benghal	<i>Commelina benghalensis</i>
Dogfennel	<i>Eupatorium capillifolium</i>
Doveweed	<i>Murdannia nudiflora</i>
Eclipta	<i>Eclipta prostrata</i>
Filaree, Redstem	<i>Erodium cicutarium</i>
Foxtail	
Bristly	<i>Setaria verticillate</i>
Giant	<i>Setaria faberi</i>
Green	<i>Setaria viridis</i>
Yellow	<i>Setaria glauca</i>
Galinsoga, Hairy	<i>Galinsoga ciliate</i>
Geranium, Carolina	<i>Geranium carolinianum</i>
Goosegrass, Indian	<i>Eleusine indica</i>
Groundsel, Common	<i>Senecio vulgaris</i>
Henbit	<i>Lamium amplexicaule</i>
Horseweed	<i>Conyza canadensis</i>
Indigo, Hairy	<i>Indigofera hirsute</i>

COMMON NAME	SCIENTIFIC NAME
Jimsonweed	<i>Datura stramonium</i>
Kochia	<i>Kochia scoparia</i>
Lady's Thumb	<i>Polygonum persicaria</i>
Lambsquarters, Common	<i>Chenopodium album</i>
Liverwort, Common*	<i>Marchantia polymorpha</i>
Lovegrass, California	<i>Eragrostis diffusa</i>
Mallow	
Common	<i>Malva neglecta</i>
Little	<i>Malva parviflora</i>
Venice	<i>Hibiscus trionum</i>
Mayweed	<i>Anthemis cotula</i>
Morningglory	
Entireleaf	<i>Ipomoea hederacea var integriuscula</i>
Ivyleaf	<i>Ipomoea hederacea</i>
Smallflower	<i>Jacquemontia tamnifolia</i>
Tall	<i>Ipomoea purpurea</i>
Moss species	<i>Bryum</i> spp.
Mulberry Weed	<i>Fatua villosa</i>
Nightshade	
Black	<i>Solanum nigrum</i>
Eastern Black	<i>Solanum ptycanthum</i>
Panicum	
Fall	<i>Panicum dichotomiflorum</i>
Texas	<i>Panicum texanum</i>
Parsley-Piert	<i>Alchemilla arvensis</i>
Pearlwort, Birdseye	<i>Sagina procumbens</i>
Pennycress, Field	<i>Thlaspi arvense</i>
Phyllanthus, Long-stalk	<i>Phyllanthus tenellus</i>
Pigweed	
Prostrate	<i>Amaranthus blitoides</i>
Redroot	<i>Amaranthus retroflexus</i>
Smooth	<i>Amaranthus hybridus</i>
Tumble	<i>Amaranthus albus</i>
Pineapple weed	<i>Matricaria matricarioides</i>
Plantain	
Broadleaf	<i>Plantago major</i>
Buckhorn	<i>Plantago lanceolata</i>
Puncturevine	<i>Tribulus terrestris</i>
Purslane, Common	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Ragweed	

COMMON NAME	SCIENTIFIC NAME
Common	<i>Ambrosia artemisiifolia</i>
Giant	<i>Ambrosia trifida</i>
Redmaids	<i>Calandrinia ciliata</i>
Rocket, Yellow	<i>Barbarea vulgaris</i>
Senna, Coffee	<i>Cassia occidentalis</i>
Sesbania, Hemp	<i>Sesbania exaltata</i>
Shepherd's-purse	<i>Capsella bursa-pastoris</i>
Sida, Prickly (Teaweed)	<i>Sida spinosa</i>
Signalgrass	<i>Brachiaria platyphylla</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Sowthistle, Annual	<i>Sonchus oleraceus</i>
Spurge	
Prostrate	<i>Euphorbia prostrata</i>
Spotted	<i>Euphorbia maculate</i>
Starbur, Bristly	<i>Acanthospermum hispidum</i>
Thickhead	<i>Crassocephalum crepidioides</i>
Thistle	
Canada	<i>Cirsium arvense</i>
Russian	<i>Salsola iberica</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Waterhemp	
Common	<i>Amaranthus rudis</i>
Tall	<i>Amaranthus tuberculatus</i>
Woodsorrel, Common Yellow	<i>Oxalis stricta</i>

*Will provide some postemergent control of liverwort which will be enhanced at higher temperatures and light levels.

SENSITIVE ORNAMENTAL SPECIES

Injury has been reported after application of this product to the plants listed in Table 3, especially when applied to small, recently transplanted liners. **DO NOT** apply this product to plants listed in Table 3. In some cases, only specific cultivars are listed because injury has not been reported on other cultivars of this species.

Table 3. SENSITIVE SPECIES

COMMON NAME	SCIENTIFIC NAME
Butterfly Bush	<i>Buddleia davidii</i>
Clethra, Summersweet	<i>Clethra alnifolia</i>
Deutzia, Slender	<i>Deutzia gracilis</i> "Nikko"
Holly, Winterberry	<i>Ilex verticillata</i>
Hydrangea	<i>Hydrangea</i> spp.
Nandina	<i>Nandina domestica</i> "Firepower"
Plumbago, Cape	<i>Plumbago auriculata</i>
Spiraea, Japanese	<i>Spiraea japonica</i>
Wax Myrtle, Southern (seedling)	<i>Myrica cerifera</i>

ORNAMENTAL SPECIES

Injury other than temporary leaf spotting has not been observed on species listed in Tables 4-6 when this product was applied at the labeled rate to established plants with a well-developed root system. Some species listed in Tables 4-6 may be injured if applied before transplanted liners have established a well-developed root system (See Restrictions for Landscape Applications section in this label for complete details). This product has not been applied to all cultivars of listed species, or under all environmental conditions and cultural practices under which these species could be grown. Prior to applying on a commercial scale, test on a small number of plants grown under similar growing conditions to ensure crop safety.

Table 4. TREES INCLUDING CHRISTMAS TREES

COMMON NAME	SCIENTIFIC NAME
Arborvitae	
American	<i>Thuja occidentalis</i>
Giant	<i>Thuja plicata</i>
Oriental	<i>Thuja orientalis</i>
Ash	
Green	<i>Fraxinus pennsylvanica</i>
White	<i>Fraxinus Americana</i>
Birch	<i>Betula</i> spp.
Cedar, Deodora	<i>Cedrus deodora</i>
Crabapple, Flowering	<i>Malus</i> spp.
Cottonwood	<i>Populus deltoides</i>
Cypress	
Italian	<i>Cupressus sempervirens</i>
Tempelhof	<i>Chamaecyparis obtusa</i>
Dogwood, Florida	<i>Cornus florida</i>
Elm, Chinese	<i>Ulmus parvifolia</i>

COMMON NAME	SCIENTIFIC NAME
Eucalyptus	
Silver Dollar	<i>Eucalyptus cinerea</i>
Red Gum	<i>Eucalyptus camaldulensis</i>
Ficus	<i>Ficus benjamina</i>
Fir	
Balsam	<i>Abies balsamea</i>
Douglas	<i>Pseudotsuga menziesii</i>
Fraser	<i>Abies fraseri</i>
Grand	<i>Abies grandis</i>
Korean	<i>Abies koreana</i>
Noble	<i>Abies procera</i>
Ginkgo	<i>Ginkgo biloba</i>
Hemlock	
Eastern	<i>Tsuga canadensis</i>
Mountain	<i>Tsuga mertensiana</i>
Western	<i>Tsuga heterophylla</i>
Lilac, Hungarian	<i>Syringa josikaea</i>
Magnolia, Lily	<i>Magnolia lilliflora</i>
Maple	
Flame	<i>Acer ginnala</i>
Flowering	<i>Abutilon hybridum</i>
Japanese	<i>Acer palmatum</i>
Red	<i>Acer rubrum</i>
Striped	<i>Acer pensylvanicum</i>
Mulberry, White	<i>Morus alba</i>
Oak	
Bear	<i>Quercus ilicifolia</i>
Live	<i>Quercus virginiana</i>
Pin	<i>Quercus palustris</i>
Red	<i>Quercus rubra</i>
Willow	<i>Quercus phellos</i>
Pine	
Eastern White	<i>Pinus strobus</i>
Jack	<i>Pinus banksiana</i>
Lacebark	<i>Pinus bungeana</i>
Loblolly	<i>Pinus laeda</i>
Lodgepole	<i>Pinus contorta</i>
Longleaf	<i>Pinus palustris</i>
Mugo	<i>Pinus mugo</i>
Ponderosa	<i>Pinus ponderosa</i>

COMMON NAME	SCIENTIFIC NAME
Sand	<i>Pinus clausa</i>
Scotch	<i>Pinus sylvestris</i>
Shortleaf	<i>Pinus echinata</i>
Slash	<i>Pinus elliotii</i>
Virginia	<i>Pinus virginiana</i>
Plum, Beach	<i>Prunus maritima</i>
Podocarpus	<i>Podocarpus</i> spp.
Poplar	<i>Populus</i> spp.
Red Cedar, Eastern	<i>Juniperus virginiana</i>
Redbud	<i>Cercis canadensis</i>
Spruce	
Blue	<i>Picea pungens</i>
Dwarf Alberta	<i>Picea glauca conica</i>
Norway	<i>Picea abies</i>
Serbian	<i>Picea omorika</i>
Sitka	<i>Picea sitchensis</i>
Sumac, Staghorn	<i>Rhus typhina</i>
Sweetgum, American	<i>Liquidambar styraciflua</i>
Sycamore	
American	<i>Platanus occidentalis</i>
California	<i>Platanus racemosa</i>
Yew, Japanese	<i>Taxus cuspidata</i>

Table 5. SHRUBS AND GROUND COVERS

COMMON NAME	SCIENTIFIC NAME
Abelia, Glossy	<i>Abelia x grandiflora</i>
Acacia	<i>Acacia</i> spp.
Anise, Purple	<i>Illicium floridanum</i>
Barberry	<i>Berberis</i> spp.
Japanese	<i>Berberis thunbergii</i>
William Penn	<i>Berberis x gladwynensis</i>
Bayberry	<i>Myrica pensylvanica</i>
Bottlebrush	<i>Callistemon</i> spp.
Boxwood, Littleleaf	<i>Buxus microphylla</i>
Camellia, Japanese	<i>Camellia japonica</i>
Cinquefoil, Shrubby	<i>Potentilla fruticosa</i>
Cotoneaster, Bearberry	<i>Cotoneaster dammeri</i>
Crepe Myrtle ¹	<i>Lagerstroemia indica</i> spp.
Elaeagnus	<i>Elaeagnus</i> spp.
English Ivy	<i>Hedera helix</i>
Euonymus, Winged ²	<i>Euonymus alatus</i>

COMMON NAME	SCIENTIFIC NAME
Firethorn, Scarlet	<i>Pyracantha coccinea</i>
Forsythia	
Border	<i>Forsythia x intermedia</i>
Weeping	<i>Forsythia suspensa</i>
White	<i>Abeliophyllum distichum</i>
Gardenia, Cape Jasmine	<i>Gardenia jasminoides</i>
Heath	<i>Erica cinerea</i>
Holly	
Chinese	<i>Ilex cornuta</i>
Inkberry	<i>Ilex glabra</i>
Japanese ²	<i>Ilex crenata</i>
Meserve ²	<i>Ilex x meserveae</i>
Nellie R. Stevens	<i>Ilex x Nellie R. Stevens</i>
Honeysuckle, Japanese	<i>Lonicera japonica</i>
Indian Hawthorn	<i>Raphiolepis indica</i>
Juniper	
Creeping	<i>Juniperus horizontalis</i>
Shore	<i>Juniperus conferta</i>
Singleseed	<i>Juniperus squamata</i>
Myoporum	<i>Myoporum parvifolium</i>
Oleander	<i>Nerium</i> spp.
Oregon Grape	<i>Mahonia</i> spp.
Pachysandra	<i>Pachysandra terminalis</i>
Photinia	<i>Photinia x fraseri</i>
Pieris, Japanese	<i>Pieris japonica</i>
Pittosporum, Japanese	<i>Pittosporum tobira</i>
Privet	
Chinese ¹	<i>Ligustrum sinense</i>
Japanese	<i>Ligustrum japonicum</i>
Pyracantha	<i>Pyracantha</i> spp.
Rhododendron, Catawba	<i>Rhododendron catawbiense</i>
Rose	<i>Rosa</i> spp.
Sweet Flag	<i>Acorus calamus</i>
Sweetspire, Virginia	<i>Itea virginica</i>
Tea Olive	<i>Osmanthus fragrans</i>
Viburnum	
Arrowwood	<i>Viburnum dentatum</i>
Pink Dawn	<i>Viburnum x bodnantense</i>
Sweet ¹	<i>Viburnum odoratissimum</i>
Weigela	<i>Weigela florida</i>

¹ Temporary injury reported at bud break on some cultivars.

² Injury reported following application to newly transplanted liners.

Table 6. NON-BEARING FRUIT AND NUT TREES AND VINES

COMMON NAME	SCIENTIFIC NAME
Apple	<i>Malus</i> spp.
Blueberry, Huckleberry	<i>Vaccinium</i> spp.
Bramble	<i>Rubus</i> spp.
Cherry, Sweet	<i>Prunus avium</i>
Citrus Fruits	<i>Citrus</i> spp.
Grape	<i>Vitis</i> spp.
Olive	<i>Olea</i> spp.
Peach	<i>Prunum persica</i>
Pear	<i>Pyrus communis</i>
Prune	<i>Prunus</i> spp.
Stone Fruits	<i>Prunus</i> spp.
Tree Nuts	
Walnut	<i>Juglans</i> spp.
Chestnut	<i>Castanea</i> spp.
Pecan	<i>Carya illionensis</i>
Pistachio	<i>Pistacia vera</i>
Almond	<i>Prunus dulcis</i>
Filbert	<i>Corylus maxima</i>

DIRECTIONS FOR USE ON ESTABLISHED TURFGRASS

This product may be applied as a single or split application to established Kentucky bluegrass, Bermudagrass, buffalograss, perennial ryegrass, St. Augustinegrass, seashore paspalum, tall fescue, fine fescue, chewing's fescue or zoysiagrass. This product provides preemergence control of annual bluegrass, goosegrass and other weeds found in Table 2. This product may be applied to turfgrass in such areas as apartment complexes, golf courses (naturalized areas, fairways, aprons, and roughs), cemeteries, sod farms, roadsides, sports fields, campgrounds, office complexes, parks, parking areas, recreational sites, schools, residential turf and other similar sites. Application of this product to turfgrass during spring green-up may cause some delay in green-up.

PREEMERGENCE APPLICATION

Apply 200 to 300 lbs. (0.25 – 0.375 lbs. ai/A) of this product per broadcast acre (4.6 to 6.9 lbs. per 1,000 sq. ft.) as a preemergence application prior to any weed germination. A higher application rate will provide longer and more consistent weed control. After application, if rain is not expected within 24 hours, irrigate the treated turf with up to 1/2" of water to obtain maximum weed control and quicker response from the fertilizer. When applying in areas with heavy weed pressure or in years with substantial rainfall following application of this product, a second application is recommended. However, **DO NOT** apply more than 600 lbs. (0.75 lb. ai/A) of this product per acre per year.

This product provides the best control of annual bluegrass when applied in the late summer/early fall prior to any plants germinating. Control may be less effective when applied in the winter after annual bluegrass has germinated. A second application (split application) of this product may be required to provide adequate season-long annual bluegrass control.

This product will provide best control of crabgrass, goosegrass and other summer annual weeds when applied in the late winter/early spring just prior to germination. Control will be less effective when applied in the spring after annual grass and broadleaf weeds have germinated. A second application (split application) of this product may be required to provide adequate season-long control of summer annual weeds.

USE AROUND BENTGRASS AND POA GREENS

This product has limited potential for lateral movement on level terrain but can potentially move down slope after excessive rainfall and affect sensitive turf species such as bentgrass, *Poa annua* and *Poa trivialis*. When applied upslope from bentgrass greens or Bermudagrass greens overseeded with *Poa trivialis*, allow an adequate buffer zone between greens and the treated area. If uncertain about the size of the buffer, 15 feet is suggested. Avoid application when heavy rain is imminent after application.

TOLERANT TURFGRASS SPECIES

If a desired turfgrass species is not listed in Tables [7][3], users are advised to evaluate the safety of this product in a small area under commercial growing conditions, and monitor plant response for four to six weeks for phytotoxicity. Testing this product in a small area will determine if this product can be used safely on a widespread basis.

TABLE [7][3]. TOLERANT TURFGRASS SPECIES

COMMON NAME
Kentucky bluegrass
Bermudagrass
Buffalograss
Perennial ryegrass
St. Augustinegrass
Seashore paspalum
Tall fescue
Fine fescue
Chewing's fescue
Zoysiagrass

RESTRICTIONS FOR APPLICATIONS TO TURFGRASS

- **DO NOT** apply more than 300 lb. (0.375 lb. ai) per acre in a single application.
- **DO NOT** apply more than 600 lb. (0.75 lb. ai) per acre per year.
- **DO NOT** apply more than 2 applications at 300 lb. (0.375 lb. ai) per acre or more than 3 applications at 200 lb. (0.25 lb. ai) per acre per year. **DO NOT** treat the same treatment site more than one time every 8 weeks.
- **DO NOT** apply to golf course putting greens or tees.
- **DO NOT** apply to creeping bentgrass, centipedegrass or Dichondra.
- **DO NOT** apply within 30 days prior to cutting or lifting sod.
- **DO NOT** apply to seedling turfgrass until after receiving 2 mowings.

USE PRECAUTIONS FOR APPLICATIONS TO TURFGRASS

- Exercise good judgment and caution when applying to turfgrass until familiarity is gained with this product.
- For St. Augustinegrass temporary discoloration may result from this product. Therefore, only apply when damage can be tolerated and when good cultural practices are planned to revive any turf damage.
- Avoid applying more than 200 lbs. (0.25 lb. ai/A) of this product per acre to St. Augustinegrass.
- Applications to wet turfgrass may result in granules sticking to the foliage and having the herbicide release, which may cause spotting or speckling of the foliage.
- Allow 2 months between application, followed by tillage, seedbed preparation and seeding of turfgrass.
- An application of this product can occur immediately before sprigging of Bermudagrass or Zoysiagrass.
- Allow 2 weeks between application and sprigging of St. Augustine and Seashore paspalum.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store product in its original bag, in a cool, dry place out of reach of children.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide 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 HANDLING:

[Nonrefillable outer bag. **DO NOT** reuse or refill the outer bag. Completely empty bag into application equipment. Offer for recycling, if available or dispose of empty bag in a sanitary landfill or by incineration.]

[For containers greater than 50 lb]

[Nonrefillable bag: **DO NOT** reuse or refill this bag. Completely empty bag by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into equipment. **DO NOT** reuse bag. Dispose of bag in a sanitary landfill or by incineration if allowed by State and local authorities. Offer for recycling if available. Liner: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into equipment. **DO NOT** reuse liner. Dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities.]

[Nonrefillable container: **DO NOT** reuse or refill this container. Offer for recycling if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Liner: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into equipment. **DO NOT** reuse liner. Dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities.]

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

WARRANTY STATEMENT

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Control Solutions, Inc. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Control Solutions, Inc. and Seller harmless for any claims relating to such factors.

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To the extent consistent with applicable law, IT IS **CONTROL SOLUTIONS INC., AND SELLERS INTENTION THAT** in no event shall Control Solutions or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF CONTROL SOLUTIONS, INC., AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF CONTROL SOLUTIONS, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

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