



# **Endurance<sup>®</sup>**

## **Herbicide**

*For selective preemergence control of grass and broadleaf weeds in:*

- Noncrop areas on or surrounding managed rights-of-way for transportation systems and utilities (including roadways, roadsides, railways, and equipment yards)
- Facilities including substations, tank farms, pumping stations, parking and storage areas, and ungrazed fence rows
- Landscape ornamentals
- Established perennial and wildflower plantings
- Conifer and hardwood seedling nurseries

*Active Ingredient:*

Prodiamine\* ..... 65.0%

*Other Ingredients:* ..... 35.0%

*Total:* ..... 100.0%

\*(CAS No. 29091-21-2)

**SCP 834C-M1D 0603**

**141583**

## **10 pounds**

**Net Weight**

**KEEP OUT OF REACH OF CHILDREN.  
CAUTION**

*See additional precautionary statements on back of bag.*

EPA Reg. No. 100-834 EPA Est. 62171-MS-001

**syngenta**

## Endurance®

FIRST AID	
If in eyes	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
If on skin or clothing	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
If inhaled	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
If swallowed	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>HOT LINE NUMBER</b> For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call <b>1-800-888-8372</b>	

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

#### CAUTION

Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### Personal Protective Equipment (PPE)

#### WPS USES:

Applicators and other handlers (other than mixers and loaders) who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR Part 170) – in general, agricultural-plant uses are covered, must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as butyl rubber >14 mils, or neoprene rubber >14 mils, or nitrile rubber >14 mils
- Shoes plus socks

Mixers and Loaders must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as butyl rubber >14 mils, or neoprene rubber >14 mils, or nitrile rubber >14 mils (see instructions for category A on the EPA chemical resistance category selection chart if you want other options)
- Shoes plus socks

#### NON-WPS USES:

Mixers and loaders who handle this pesticide for any use NOT covered by the Worker Protection Standard (40 CFR Part 170) – in general, only agricultural-plant uses are covered by the WPS, must wear:

- Waterproof gloves

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.

### Engineering Controls Statements

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

#### User Safety Recommendations:

##### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- After handling this product, immediately wash the outside of gloves before removing them, then remove gloves and all other PPE. Immediately wash thoroughly and change into clean clothing.

### Environmental Hazards

This product has low solubility in water. At the limit of solubility, this product is not toxic to fish. However, at concentrations substantially above the level of water solubility, it may be 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 sites. Do not contaminate water when disposing of equipment wash water.

### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**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.

The Directions for Use of this product should be followed carefully. 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 manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA 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 SYNGENTA 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 SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitations of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

### DIRECTIONS FOR USE

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

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 12 hours.**

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves such as butyl rubber >14 mils, or neoprene rubber >14 mils, or nitrile rubber >14 mils (see instructions for Category A on the EPA chemical-resistance category selection chart if you want other options)
- Shoes plus socks

### STORAGE AND DISPOSAL

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

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## Storage

Store in original container away from fertilizer, feed, or food stuffs and separated from other pesticides.

## 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

**Paper and Plastic Containers:** Completely empty container into application equipment. Then dispose of empty container in a sanitary landfill or at an incineration facility, or, if allowed by state and local authorities, by burning locally. If burned, stay out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

## GENERAL INFORMATION

### WHERE TO USE

Endurance Herbicide is a selective preemergence herbicide that provides residual control of many grass and broadleaf weeds in vegetation management situations including:

- Noncrop areas on or surrounding managed rights-of-way for transportation systems and utilities (including roadways, roadsides, railways, and equipment yards)
- Facilities including substations, tank farms, pumping stations, parking and storage areas, and ungrazed fence rows
- Landscape ornamentals
- Established perennial and wildflower plantings
- Conifer and hardwood seedling nurseries

### HOW ENDURANCE WORKS

Endurance controls susceptible weeds by growth and development of newly germinated weed seeds. Weed control is most effective when Endurance is activated by at least 0.5 inch of rainfall or irrigation, or with shallow incorporation (1-2 inches), before weed seeds germinate and within 14 days following application.

### USE PRECAUTIONS

Do not graze or feed livestock forage cut from areas treated with Endurance.

Do not apply Endurance to plants that will be consumed for food use.

Follow all applicable directions, restrictions, and precautions on the labels of EPA registered tank mix partners.

Do not blend Endurance onto dry fertilizer or any other granular material.

**Chemigation:** Do not apply this product through any type of irrigation system.

Do not apply aerially.

### NEW PLANTINGS, REPLANTING AND ROTATIONAL PLANTINGS

Nursery, landscape, or non-crop land areas treated with Endurance should be rotated only to ornamental species listed on this label for 1 year following application unless the following test has shown species safety:

Before planting a species not listed on this label, it is recommended that several test strips of an indicator plant such as wheat, sorghum or corn be sown into the treated area. If the indicator plants germinate and grow normally to a height of 12 inches with normal root development, it is safe to plant.

In areas disturbed by new plantings or replanting of labeled species, it may be necessary to retreat exposed soil to maintain satisfactory weed control.

## MIXING AND APPLICATION PROCEDURES

### MIXING

Endurance must be mixed thoroughly in the spray tank to ensure uniform application. Follow these steps:

1. Fill the spray tank  $\frac{1}{4}$  full with clean water or fluid fertilizer only.
2. Start agitation and check to ensure it is working properly.
3. Add Endurance directly into the tank.
4. Add the rest of the carrier to obtain the final spray volume.
5. A spray colorant may be used with Endurance to mark areas as they are treated. This will improve application accuracy by minimizing swath skips and overlaps.
6. Maintain vigorous agitation in the spray tank before and during the application. This will ensure a well-mixed spray suspension.
7. Do not allow spray suspension to dry in the tank. Thoroughly clean the sprayer after use by flushing the system with water containing a detergent. Refer to **Pesticide Disposal** section of this label for waste disposal.

**TANK MIXING ENDURANCE**

Endurance may be tank mixed with certain other EPA-registered herbicides to provide a broader spectrum of weed control or to control emerged weeds. Refer to the specific directions for use for tank mix partners, and consult the label(s) of the individual tank mix partner(s) for use rate, application timing, weeds controlled, and specific precautions and/or restrictions. Tank mixes are permitted only in states where the tank mix partner(s) are registered for the application site and the turf and ornamental species listed. When using Endurance in a tank mixture with other pesticides, observe the most restrictive label limitations and precautions on the labels of the products used.

Before tank mixing with other pesticides not named on this label, compatibility must be tested. See the **Compatibility Test** section below.

**COMPATIBILITY TEST**

Before mixing Endurance with other pesticides in the spray tank, test the compatibility by mixing all components (carrier and pesticide products) in a small container in proportionate quantities. For example, a 1-quart jar would be 1/100 the volume of a 25 gal./A spray rate. At 1 lb./A the Endurance rate would be proportional to 4.5 g per quart. Add approximately 1.5 teaspoons to a quart of water. Calculate amounts for other products based on rate per acre. An approximate volume would be 1.5 teaspoons for each pound per acre of a dry formulation and 0.5 teaspoons for each pint per acre of a liquid formulation. (See following table).

**Amount of Component to Add to One Quart Jar of Spray Carrier  
(Assuming Carrier Volume of 25 gals./A)**

Component Formulations	Rate Per		Level Teaspoons
	Acre	1,000 Sq. Ft.	
Endurance	1.0 lb.	0.4 oz.	1 1/2
Dry Tank Mix Partners	1.0 lb.	0.4 oz.	1 1/2
Liquid Tank Mix Partners	1.0 pt.	0.4 oz.	1/2

If components do not ball up or form flakes, sludge, gels, oily films or layers then the mixture is compatible. Incompatibility will usually occur within 5 minutes after mixing. If the components are not compatible, a compatibility agent must be added to the tank mixture. Rerun the test to determine if the mixture is suitable after addition of the compatibility agent. If components are still not compatible, do not tank mix.

**MIXING ORDER FOR TANK MIXTURES**

**Notes:** 1) When mixing Endurance with other components (carrier and partner pesticide products), allow products to completely dissolve between steps. This is key when tank-mixing with ester formulations. 2) Maintain agitation throughout mixing and application of the mixture.

Add the products to the spray tank in the following order:

1. Add products packaged in water-soluble bags first. Agitate the tank mixture. Allow the water-soluble bags to completely dissolve and the product to disperse before adding any other tank-mix partner.
2. Then add water dispersible granules (WDG or WG formulations) and wettable powders (WP formulations). Add wettable powders to the tank as agitation continues. Allow the product to disperse completely before other products are added.
3. Add spray adjuvants and spray markers. Read the adjuvant's label first and use only those adjuvants approved for application to turf and ornamentals.
4. Add flowable liquids (FL) or suspension concentrates (SC).
5. Add emulsifiable concentrates (EC) last.

**APPLICATION**

Apply Endurance in a minimum of 20 gals./A (0.5 gal./1,000 sq. ft.) of carrier (water and/or fluid fertilizer) using a calibrated, low pressure sprayer with 50 mesh or coarser screens. A broadcast boom or hand held wand designed for herbicide or insecticide application will provide the best results. Select nozzle pressure and gallonage to provide complete coverage.

**VEGETATION MANAGEMENT USE DIRECTIONS**

Endurance may be applied to soil surfaces for preemergence control of many grass and broadleaf weeds in:

- Non-crop areas, including ornamentals (does not include container or field grown ornamentals), and established perennial and wildflower plantings on or surrounding:
  - Municipal grounds and government installations
  - Managed rights-of-way for transportation systems and utilities including roadways, roadsides, railways, and equipment yards
  - Facilities including substations, tank farms, pumping stations, parking and storage areas, and ungrazed fence rows

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### WEEDS CONTROLLED

When used as directed in this label Endurance will control the following weeds:

Barnyardgrass	Kochia
Bluegrass, Annual (Poa annua) <sup>1</sup>	Lambsquarter, Common
Carpetweed	Lovegrass
Chickweed, Common <sup>1</sup>	Panicum (Texas, Fall, Browntop)
Chickweed, Mouseear (from seed)	Pigweed
Crabgrass (Large, Smooth) <sup>3</sup>	Purslane, Common
Crowfootgrass	Pusley, Florida
Cupgrass, Woolly	Rescuegrass <sup>2</sup>
Foxtails, Annual	Shepherd's Purse <sup>1</sup>
Goosegrass <sup>3</sup>	Signalgrass, Broadleaf
Henbit <sup>1</sup>	Speedwell, Persian
Itchgrass	Sprangletop
Johnsongrass (from seed)	Spurge, Prostrate
Junglerice	Witchgrass
Knotweed <sup>1</sup>	Woodsorrel, Yellow (from seed)

<sup>1</sup> To control this weed, apply Endurance in late summer, fall, or winter before weed seeds germinate.

<sup>2</sup> Suppression only.

<sup>3</sup> Sequential applications may be made as long as the total amount of product applied does not exceed 2.3 lbs./A per year. To control weeds, all applications must be made before weed seeds germinate.

### Application Timing and Information

Endurance:

- Provides residual preemergence weed control.
- Will not control emerged weeds.
- May be applied to newly transplanted and established ornamentals as a broadcast or over-the-top spray.
- Is most effective when the product is activated in the soil before weed seeds germinate and within 14 days after application.
- Is activated when the treated area receives at least 0.5 inch of irrigation or rainfall or shallow (1-2 inches) mechanical incorporation.
- Is most effective when applied to soil free of clods, weeds, and debris such as leaves and mulch.

### Use Precautions

To reduce injury potential:

- Direct application of Endurance to rapidly growing tissue or buds may injure desirable plants. In the spring when buds are rapidly growing and expanding, over-the-top application of Endurance may temporarily injure new growth of desirable plants. To reduce the possibility of injury at this time, wait to apply Endurance over the top of newly emerged vegetation until it has hardened off unless your experience indicates that the ornamental plant will not be injured by the over-the-top application.
- After application (immediately for deciduous plants), irrigate the treated area to wash Endurance from plant surfaces onto soil. Watering plants before application may improve the washing process.

### How Much and When to Apply

Amount to Apply (Broadcast)	When to Apply	Comments/Instructions
1.0-2.3 lbs./A or 0.37-0.83 oz./ 1,000 sq. ft.	In fall and/or spring before weeds germinate or after weeds are removed.	<ul style="list-style-type: none"> <li>• Use the higher rate for longer control.</li> <li>• Endurance may be applied more than once per year as long as the total amount of product applied does not exceed 2.3 lbs./A per year.</li> </ul>

**\*Note:** For band application calculate amount per acre:

Band width in inches X broadcast rate = amt. to apply/acre of field  
Row width in inches

### Equivalent Measurements for Endurance

lbs./A	oz./1,000 sq. ft.	Approximate Equivalent Tablespoons/1,000 sq. ft.
1.0	0.37	1
1.5	0.55	1½
2.0	0.74	2
2.3	0.83	2¼

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## Application Sites and Use Precautions

Site	Use Precautions
Ornamental Trees, Shrubs, Vines	<ul style="list-style-type: none"> <li>• Apply as a broadcast, over-the-top, or as a directed spray.</li> <li>• Delay applications to newly transplanted ornamentals until soil has settled around transplants.</li> </ul>
Ornamental Bulbs and Perennial Wildflower Plantings	<ul style="list-style-type: none"> <li>• May be applied to bulbs or perennial wildflower species listed in the section <b>Tolerant Ornamental Species</b>.</li> <li>• Apply before or after bulbs emerge but before bulbs bloom and weeds emerge.</li> <li>• In wildflowers a postemergence herbicide labeled for wildflowers may be needed to control weeds that have already emerged.</li> </ul>

## Tank Mixtures

Endurance may be tank mixed with other registered herbicides listed on this label to provide a broader spectrum of weed control or to control emerged weeds. Tank mixes with Endurance are for use only in states where the tank mix partner(s), application site and intended use pattern are registered.

Follow the label(s) of the tank mix partner(s) for application rates, timing, weeds controlled, tolerant ornamentals, and specific use precautions and/or restrictions. Before combining tank mix partners in the spray tank test compatibility by mixing the products in a small container. See the **Compatibility Test** section.

## Tank Mix Partners for Endurance

Product	Precautions/Instructions
Goal® (use on conifers only)	<ul style="list-style-type: none"> <li>• Mix with Endurance for postemergence control of certain broadleaf weeds including malva and filaree.</li> </ul>
Gallery®, Princep®, Pennant®	<ul style="list-style-type: none"> <li>• See product labels for weed spectrum and tolerant ornamentals.</li> </ul>
Touchdown® Pro (or other glyphosate-based products) Reward® and Finale®	<ul style="list-style-type: none"> <li>• These non-selective tank mix herbicides control most <b>emerged</b> annual broadleaves and grasses.</li> <li>• <b>Take extreme care</b> to prevent tank mixtures with these partner products from contacting the foliage and stems of turfgrass, trees, shrubs, or other desirable vegetation because desirable vegetation may be severely injured or killed. Apply these tank mixtures as a directed spray and use a shield to prevent spray from contacting foliage of desirable plants.</li> <li>• Following instructions on the tank mix partner's label, delay irrigation of the treated area to allow time for the herbicide to be absorbed by weed foliage.</li> </ul>

## Table 1 – Tolerant Ornamental Species\* – All States

Endurance will not harm most trees, shrubs, vines, and flowers. The species listed below in Table 1 are tolerant to Endurance. Endurance is approved for application, except in California, to the species in Table 2. Endurance may be applied over-the-top of the listed species.

When plants are under stress (such as heat, drought, or frost damage) some cultivars of listed plants may be sensitive to Endurance.

Scientific Name	Common Name
<i>Abies</i> spp.	Fir species (Balsam, Fraser, Noble, etc.)
<i>Acer palmatum</i>	Japanese Maple
<i>Acer platanoides</i>	Norway Maple***
<i>Actinidia chinensis</i>	Kiwi**
<i>Agapanthus africanus</i>	Lily-of-the-Nile (African Lily)
<i>Arctostaphylos densiflora</i>	Vine Hill Manzanita
<i>Arctotheca calendula</i>	Cape Weed
<i>Aucuba japonica</i>	Japanese Aucuba
<i>Berberis gladwynensis</i>	Barberry
<i>Berberis julianae</i>	Wintergreen Barberry
<i>Berberis mentorensis</i>	Mentor Barberry
<i>Berberis thunbergii</i>	Japanese Barberry
<i>Berberis verruculosa</i>	Warty Barberry
<i>Buxus microphylla</i>	Japanese Boxwood
<i>Callistemon viminalis</i>	Weeping Bottlebrush
<i>Calluna vulgaris</i>	Scotch Heather
<i>Carpobrotus edulis</i>	Hottentot Fig (Ice Plant)
<i>Cassia artemisioides</i>	Feathery Cassia
<i>Ceanothus rigidus</i>	Wild Lilac
<i>Chamaecyparis pisifera</i>	False Cypress
<i>Cleyera japonica</i>	Cleyera
<i>Citrus</i> spp.	Citrus species**

continued...

## Endurance®

**Table 1 – Tolerant Ornamental Species\* – All States (*continued*)**

Scientific Name	Common Name
<i>Cornus florida</i>	Flowering Dogwood
<i>Cornus stolonifera</i>	American Dogwood
<i>Cortaderia selloana</i>	Pampas Grass
<i>Cotoneaster apiculatus</i>	Cranberry Cotoneaster
<i>Cotoneaster buxifolius</i>	Cotoneaster
<i>Cotoneaster dammeri</i>	Bearberry Cotoneaster
<i>Cotoneaster microphyllus</i>	Rockspray Cotoneaster
<i>Crataegus</i> spp.	Hawthorne
<i>Cupressus sempervirens</i>	Italian Cypress
<i>Delosperma alba</i>	White Trailing Ice Plant
<i>Dodonaea viscosa</i>	Hop Bush
<i>Elaeagnus pungens</i>	Silverberry
<i>Euonymus fortunei</i>	Wintercreeper
<i>Euonymus japonica</i>	Japanese Spindle Tree (Evergreen Euonymus)
<i>Euonymus kiautschovicks</i>	Spreading Euonymus
<i>Fatsia japonica</i>	Japanese Aralia
<i>Forsythia intermedia</i>	Border Forsythia
<i>Forsythia viridissima</i>	Greenstem Forsythia
<i>Gardenia jasminoides</i>	Gardenia, Cape-Jasmine
<i>Gladiolus</i> spp.	Gladiolus species
<i>Hedera helix</i>	English Ivy
<i>Hibiscus</i>	Rose of Sharon
<i>Hibiscus Rosa-sinensis</i>	Chinese Hibiscus
<i>Ilex cornuta</i>	Chinese Holly
<i>Ilex crenata</i>	Japanese Holly
<i>Ilex opaca</i>	American Holly
<i>Ilex pernyi</i>	Holly
<i>Ilex vomitoria</i>	Yaupon Holly
<i>Iris</i> spp.	Iris species
<i>Jasminum nudiflorum</i>	Winter Jasmine
<i>Juniperus chinensis</i>	Chinese Juniper
<i>Juniperus conferta</i>	Shore Juniper
<i>Juniperus horizontalis</i>	Creeping Juniper
<i>Juglans</i> spp.	Walnut**
<i>Justicia brandegeana</i>	Shrimp Plant
<i>Lagerstromia indica</i>	Crape Myrtle
<i>Ligustrum amurense</i>	Amur Privet
<i>Ligustrum japonicum</i>	Japanese Privet
<i>Ligustrum lucidum</i>	Glossy Privet (Wax-Leaf)
<i>Liriope muscari</i>	Big Blue Lillyturf
<i>Lonicera japonica</i>	Japanese Honeysuckle
<i>Lonicera tatarica</i>	Tatarian Honeysuckle
<i>Magnolia</i> spp.	Magnolia species
<i>Malephora luteola</i>	Ice Plant
<i>Malus</i> spp.	Crabapple**
<i>Nandina domestica</i>	Heavenly Bamboo
<i>Narcissus</i> spp.	Narcissus species
<i>Nerium</i> spp.	Oleander
<i>Olea europaea</i>	Olive**
<i>Ophiopogon japonicus</i>	Mondo Grass
<i>Osteospermum fruticosum</i>	Trailing African Daisy
<i>Oxydendrum arboreum</i>	Sourwood
<i>Persea americana</i>	Avocado**
<i>Photinia fraseri</i>	Frasier's Photinia (Redtip)
<i>Picea</i> spp.	Spruce species*** (Colorado Blue, Norway, etc.)
<i>Pieris japonica</i>	Lily-of-the-Valley Shrub
<i>Pinus brutia</i>	Calabrian Pine
<i>Pinus canariensis</i>	Canary Island Pine
<i>Pinus elliottii</i>	Slash Pine
<i>Pinus halepensis</i>	Aleppo Pine
<i>Pinus nigra</i>	Austrian Black Pine
<i>Pinus palustris</i>	Longleaf Pine
<i>Pinus radiata</i>	Monterey Pine
<i>Pinus strobus</i>	Eastern White Pine
<i>Pinus sylvestris</i>	Scotch Pine
<i>Pinus taeda</i>	Loblolly Pine
<i>Pinus thunbergiana</i>	Japanese Black Pine
<i>Pinus virginiana</i>	Virginia Pine
<i>Pistacia</i> spp.	Pistachio**
<i>Pittosporum rhombifolium</i>	Queensland Pittosporum
<i>Pittosporum tobira</i>	Japanese Pittosporum

*continued...*



## Endurance®

**Table 1 – Tolerant Ornamental Species\* – All States (continued)**

Scientific Name	Common Name
<i>Podocarpus macrophyllus</i>	Japanese Yew
<i>Prunus laurocerasus</i>	English Laurel
<i>Prunus</i> spp.	Almond, Apricot, Nectarine, Peach, Plum, and Prune**
<i>Pseudotsuga menziesii</i>	Douglas Fir***
<i>Pyracantha coccinea</i>	Firethorn, Scarlet
<i>Pyracantha fortuneana</i>	Firethorn
<i>Pyracantha koidzumii</i>	Firethorn
<i>Pyrus</i> spp.	Bradford Pear spp.
<i>Quercus rubra</i>	Oak species
<i>Rhaphiolepis indica</i>	Indian Hawthorne
<i>Rhododendron</i> (including Azalea)	'Coral Bells' 'Formosa' 'Hino-crimson' 'PJM' 'Roseum Elegans'
<i>Rosa banksiae</i>	Lady Bank's Rose
<i>Rosmarinus officinalis</i>	Rosemary**
<i>Rumohra adiantiformis</i>	Leatherleaf Fern
<i>Santolina virens</i>	
<i>Sedum album</i>	Stonecrop
<i>Syzygium paniculatum</i>	Japanese Boxcherry
<i>Taxus cuspidata</i>	Japanese Yew
<i>Taxus media</i>	Yew
<i>Thuja occidentalis</i>	American Arborvitae
<i>Trachelospermum asiaticum</i>	Star Jasmine
<i>Tsuga canadensis</i>	Canada Hemlock
<i>Tulipa</i> spp.	Tulip species
<i>Viburnum japonicum</i>	Japanese Viburnum
<i>Viburnum odoratissimum</i>	Sweet Viburnum
<i>Viburnum plicatum</i>	Japanese Snowball
<i>Viburnum rigidum</i>	Canary Island Viburnum
<i>Viburnum tinus</i>	Laurustinus
<i>Viburnum trilobum</i>	Cranberry Bush
<i>Viburnum wrightii</i>	Leatherleaf Viburnum
<i>Vinca major</i>	Vinca
<i>Vinca minor</i>	Dwarf Periwinkle
<i>Vitis</i> spp.	Grape**
<i>Weigela florida</i>	Old Fashioned Weigela
<i>Yucca aloifolia</i>	Spanish Bayonet
<i>Yucca filamentosa</i>	Yucca, Adam's Needle

\*Not for use on container or field grown ornamentals.

\*\*Do not use on food producing trees, vines, or plants.

\*\*\*Landscape ornamentals only.

**Table 2 – Tolerant Ornamental Species\* – All States Except CA**

Scientific Name	Common Name
<i>Abelia grandiflora</i>	Abelia: Sherwood
<i>Achillea</i> spp.	Yarrow: King Edward
<i>Agapanthus orientalis</i>	
<i>Akebia quinata</i>	Five-Leaf or Chocolate Vine
<i>Allium cernuum</i>	Lady's Leek, Nodding Onion
<i>Anemone hybrida</i>	Japanese Anemone
<i>Aquilegia</i> spp.	Aquilegia: Red and Gold
<i>Artemisia</i> spp.	Wormwood; Silver Mound, Castle
<i>Aster</i> spp.	Aster: Bonny Blue, Purple Dome
<i>Aster X frikartii</i>	
<i>Athyrium filix-femina</i>	Lady Fern; Fern Lady
<i>Begonia</i> spp.	Fibrous Begonia: Hardy Grandis
<i>Bergenia cordifolia</i>	
<i>Boltonia asteroides</i>	Snowbank
<i>Bougainvillea</i> spp.	Bougainvillea
<i>Buddleia davidii</i>	Butterfly-Bush (Dwarf Blue); Royal Red
<i>Callistemon citrinus</i>	Crimson Bottlebrush
<i>Campanula carpatica</i>	Tussock Bellflower; (White Clips)
<i>Campis X tagliabuana</i>	Trumpet Creeper, Trumpet Flower; Madame Galen
<i>Ceratostigma plumbaginoides</i>	
<i>Chrysanthemum nipponicum</i>	
<i>Coreopsis</i> spp.	Coreopsis (Calliopsis): Early Sunrise, Moonbeam
<i>Crocosmia</i> spp.	Lucifer
<i>Delosperma</i> spp.	Cooperi Pink
<i>Delphinium</i> spp.	Larkspur; Blue Elf

continued...

## Endurance®

**Table 2 – Tolerant Ornamental Species\* – All States Except CA (continued)**

Scientific Name	Common Name
<i>Dianthus deltoides</i>	Dianthus, Maiden Pinks 'Zing'
<i>Dianthus gratianopolitanus</i>	Cheddar Pink
<i>Echinacea pupurea</i>	Coneflower, Purple; Magnus
<i>Forsythia suspensa</i>	Weeping Forsythia
<i>Gaillardia</i> spp.	Gaillardia, Blanket Flower: 'Goblin'
<i>Gaura</i> spp.	
<i>Gentiana dahurica</i>	Gentian
<i>Geranium cinereum</i>	Cranesbill
<i>Gypsophila repens</i>	Baby's Breath
<i>Helianthemum</i> spp.	Sunrose
<i>Hemerocallis</i> spp.	Daylily: Aztec Gold, Stella De Oro, Tender Love
<i>Heucherella</i> spp.	Coral Bell; Bridget Bloom
<i>Hibiscus</i> spp.	Mallow; Disco Belle White
<i>Hosta plantaginea</i>	Hosta, Plantain Lily (Fragrant)
<i>Hosta sieboldiana</i>	Hosta, 'Searsucker'
<i>Houttuynia cordata</i> var. <i>variegata</i>	
<i>Hydrangea macrophylla</i>	Bigleaf Hydrangea
<i>Inula ensifolia</i>	
<i>Iris ensata</i>	Sword-Leaved Iris; Jodlesong
<i>Iris siberica</i>	Siberian Iris; Cabernet
<i>Juniperus davurica</i>	Parsoni
<i>Lagerstromia indica</i> x <i>fauriei</i>	Crape Myrtle; Tuscarora
<i>Lantana montevidensis</i>	Weeping Lantana
<i>Lavender</i> spp.	Lavender; Munstead
<i>Leontopodium alpinum</i>	Edelweiss
<i>Ligustrum sinense</i>	Chinese Privet; Variegata
<i>Lilium</i> spp.	Lily: Jazz
<i>Liriope muscari</i> var. <i>variegata</i>	Liriope, Variegated
<i>Liriope spicata</i>	Liriope, Creeping
<i>Lobelia cardinalis</i>	Cardinal Flower, Indian Pink
<i>Loropetalum chinense</i>	Burgundy
<i>Lythrum</i> spp.	Loosestrife; Modern Pink
<i>Miscanthus sinensis</i>	Yaku Jima, Silberfeder**
<i>Oenothera missouriensis</i>	Evening Primrose
<i>Osmanthus heterophyllus</i>	Osmanthus (False Holly): Gulf Tide
<i>Paeonia suffruticosa</i>	Tree Peony
<i>Pennisetum setaceum</i>	Fountain Grass (Dwarf)**
<i>Perovskia atriplicifolia</i>	
<i>Physostegia virginiana</i>	Dragonhead, False; Vivid
<i>Quercus shumardii</i>	Oak, Shumard's Red
<i>Rhaphiolepis umbellata</i>	Yedda Hawthorne
<i>Rhododendron</i>	'Delaware Valley White'
(including Azalea)	'Flame Creeper'
	'Girard Crimson'
	'George L. Tabor'
	Wakeiebisu
	White Gumbo
<i>Rudbeckia</i> spp.	Black-Eyed Susan: Goldstrum
<i>Saxifraga</i> spp.	Saxifrage; Purple Dome
<i>Scabiosa</i> spp.	Pincushion Flower
<i>Sedum caudicicola</i>	Stonecrop; Lidakense
<i>Sedum dasyphyllum</i>	Stonecrop
<i>Sedum spurium</i>	Stonecrop; Dragon's Blood
<i>Spiraea bumalda</i>	Spiraea: Anthony Waterer
<i>Syzyglum paniculatum</i>	Australian Brushcherry
<i>Teucrium</i> spp.	Germander
<i>Thalictrum dipterocarpum</i>	Meadow Rue
<i>Veronica</i> spp.	Veronica, Speedwell; Sunny Border
<i>Viburnum suspensum</i>	Arrowwood Viburnum

\*Not for use on container or field grown ornamentals.

\*\*Landscape ornamentals only.

## Endurance®

### CONIFER AND HARDWOOD SEEDLING NURSERIES (NON-ORNAMENTAL, FORESTRY USE ONLY)

Endurance:

- Provides residual preemergence weed control in conifer and hardwood seedling nurseries.
- Provides the most effective weed control when the product is activated in the soil by 0.5 inch of irrigation or rainfall before weed seeds germinate and within 14 days after application.
- Should be applied to conifer and hardwood seedling nurseries any time after the soil has settled around newly-transplanted seedlings and liners.

Site	Application Rate		Timing	Comments/Instructions
	lbs./A	oz./1,000 sq. ft.		
Conifer and Hardwood Seedling Nurseries	1.0-2.3	0.37-0.84	Apply in fall or spring before weed seeds germinate or after weeds are removed.	<ul style="list-style-type: none"> <li>• Use higher rate for longer control.</li> <li>• More than one application per year is permitted, but do not apply more than 2.3 lbs./A per year.</li> </ul>
Southern Pine Seedbeds	0.75		Just after seeding and/or a minimum of 3 weeks after most seedlings have shed their seedcoat	<ul style="list-style-type: none"> <li>• To assist in the establishment of Southern pine seedbeds, apply this product preemergence just after seeding pines.</li> <li>• Application after emergence of pine seedlings should not occur until 3 weeks after most seedlings have shed their seedcoat.</li> <li>• Mix this product with clean water and broadcast spray at 20 to 40 psi in a minimum of 20 gals. of water per treated area.</li> <li>• After application, sprinkler irrigate beds with approximately 1/2 inch of water.</li> </ul>
Hardwood Seedbeds: Oak (Quercus spp.), Sweetgum, Green Ash	0.75-1.5		When seedlings are at least 6 weeks old (from time of 50% germination)	<ul style="list-style-type: none"> <li>• Use higher rate for longer control and when higher weed pressure is anticipated.</li> <li>• The lower rate will provide 2 to 3 months of weed control.</li> <li>• Broadcast to beds and apply approximately 1/2 inch of sprinkler irrigation afterwards.</li> </ul>

#### Tank Mixtures – Conifer Seedling Nurseries

Endurance may be tank mixed with other registered herbicides listed on this label to provide a broader spectrum of weed control or to control emerged weeds. Tank mixes with Endurance are for use only in states where the tank mix partner, application site and intended use pattern are registered.

Follow the label of the tank mix partner for application rates, timing, weeds controlled, tolerant ornamentals, and specific use precautions and/or restrictions. Before combining the tank mix partner in the spray tank, test compatibility by mixing the products in a small container. See the **Compatibility Test** section.

#### Tank Mixing and Application

##### Tank Mix Partner for Endurance – Conifer Seedling Nurseries

Product	Precautions/Instructions
Goal (use on conifers only)	<ul style="list-style-type: none"> <li>• Mix with Endurance for postemergence control of certain broadleaf weeds including malva and filaree.</li> </ul>

## Endurance®

### VEGETATION MANAGEMENT (NON-CROP AREAS)

- May be applied to soil surfaces for preemergence control of many grass and broadleaf weeds.
- Is most effective when activated by at least 0.5 inch rainfall or irrigation, or shallow incorporation before weed seeds germinate and within 14 days after application.

Site	Application Rate		Timing	Comments/Instructions
	lbs./A	oz./1,000 sq. ft.		
Non Crop Areas, including ornamentals, on or surrounding managed rights-of-way for transportation systems and utilities (including roadways, roadsides, railways, and equipment yards)  Facilities including substations, tank farms, pumping stations, parking and storage areas, and ungrazed fence rows	1.0-2.3	0.36-0.83	Before weed seeds germinate	<ul style="list-style-type: none"> <li>• Use higher rate for longer control.</li> <li>• This product may be applied more than once per year but do not apply more than 2.3 lbs./A per year.</li> </ul>

Endurance may be tank mixed with other registered herbicides to provide a broader spectrum of weed control or to control emerged weeds or brush. Tank mixes with Endurance are for use only in states where the tank mix partner(s) are registered for the application site.

#### Tank-Mix Partners with Endurance

Products	Comments
Touchdown Pro (and glyphosate-based products <sup>1</sup> ), Gramoxone®, Reward, Predict®, Princep, Vanquish®, diuron-based products <sup>1</sup> , Finale, Gallery, Garlon®, Goal, Krovar® I and II, Oust®, Arsenal®, Spike™, and Telar®	<ul style="list-style-type: none"> <li>• Follow the label(s) of the tank mix partner(s) for application rates, timing, weeds controlled, tolerant ornamentals, and specific use precautions and/or restrictions.</li> <li>• Do not mix Endurance with any product whose label prohibits mixing with another pesticide.</li> </ul>

<sup>1</sup>Products with this chemical as the active ingredient and which are labeled for the same use may be used.

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