

PRODIAMINE	GROUP 3	HERBICIDE
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# Resolute® 4FL

## HERBICIDE

For selective preemergence control of grass and broadleaf weeds in:

- Established turfgrasses (excluding golf course putting greens), lawns, and sod nurseries
- Container, field-grown, and landscape ornamentals
- Conifer and hardwood seedling nurseries
- Established perennial and wildflower plantings
- Christmas tree farms
- Non-crop areas, including plantings on 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

Active Ingredient:	
Prodiamine*	40.7%
Other Ingredients:	
	59.3%
Total:	
	100.0%

\*CAS No. 29091-21-2

Resolute 4FL contains 4 pounds active ingredient per gallon.

**KEEP OUT OF REACH OF CHILDREN.**

## CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1139

EPA Est. 70815-GA-002

Product of India

**SCP 1139B-L2A 0224**

# 2.5 Gallon

Net Contents

### FIRST AID

<b>If swallowed</b>	<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 a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious or convulsing person.</li> </ul>
<b>If in eyes</b>	<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>
<b>If inhaled</b>	<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 mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<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>

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

### HOTLINE NUMBER

For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident)  
Call

**1-800-888-8372**

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

#### CAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Avoid breathing vapor. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

### Personal Protective Equipment

#### WPS Uses:

Applicators, mixers, loaders, and other handlers 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
- Shoes plus socks

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.

### Engineering Control 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.

**IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided with all of the PPE specified above for applicators and other handlers, and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

### 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 remove PPE, wash yourself thoroughly and change into clean clothing.

continued...

## PRECAUTIONARY STATEMENTS (continued)

### 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 or rinsate.

**NON-TARGET ORGANISM ADVISORY STATEMENT:** This product 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 spray drift.

## 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 must 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, LLC or Seller. To the extent permitted by applicable law, 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. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. To the extent permitted by applicable law, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, 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 Limitation 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 barrier laminate, butyl rubber ≥14 mils, natural rubber ≥14 mils, neoprene rubber ≥14 mils, nitrile rubber ≥14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils or Viton™ ≥ 14 mils.
- Shoes plus socks

## NON-AGRICULTURAL USE REQUIREMENTS

The requirements of this box apply to uses of this product that are **NOT** within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The "WPS" applies when this product is used to produce agricultural plants on farms, forest or nurseries. Applicators and handlers should wear long-sleeved shirt, long pants, chemical resistant gloves, shoes with socks and protective eyewear. Thoroughly wash face and hands with soap and water after exposure and before eating or smoking. Launder exposed clothing before reuse. Do not allow reentry to treated areas until dust has settled and the turf grass or soil is dry.

## USE INFORMATION

### WHERE TO USE

Resolute 4FL is a selective preemergence herbicide that provides residual control of many grass and broadleaf weeds in:

- Established turfgrasses (excluding golf course putting greens), lawns, and sod nurseries
- Container, field-grown, and landscape ornamentals
- Conifer and hardwood seedling nurseries
- Established perennial and wildflower plantings
- Christmas tree farms
- Non-crop areas, including plantings on 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

### HOW RESOLUTE 4FL WORKS

Resolute 4FL controls susceptible weeds by preventing growth and development of newly germinated weeds. Weed control is most effective when Resolute 4FL is activated by at least 0.5 inch of rainfall or irrigation or shallow incorporation (1-2 inches) before weed seeds germinate and within 14 days following application.

### WEED RESISTANCE MANAGEMENT

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For resistance management, Resolute 4FL is a Group 3 herbicide. Any weed population may contain or develop plants naturally resistant to Resolute 4FL and other Group 3 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 Resolute 4FL or other Group 3 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.
- 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 recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Syngenta Crop Protection at 1-800-334-9481.

#### USE PRECAUTIONS AND RESTRICTIONS

1. Do not graze or feed livestock forage cut from areas treated with Resolute 4FL.
2. Follow all applicable directions, restrictions, and precautions on the labels of EPA-registered tank-mix partners.
3. Do not blend Resolute 4FL onto dry fertilizer or any other granular material.
4. **Chemigation:** Do not apply this product through any type of irrigation system unless instructed otherwise in this label.
5. Do not apply aerially.
6. Do not apply to golf course putting greens.

#### SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### Controlling Droplet Size – Ground Boom

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

#### BOOM HEIGHT – Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

#### WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

#### Boomless Ground Applications:

- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

#### Handheld Technology Applications:

- Take precautions to minimize spray drift.

### MIXING AND APPLICATION PROCEDURES

#### MIXING RESOLUTE 4FL ALONE

Resolute 4FL 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 only.
2. Start agitation and check to ensure it is working properly.
3. Add Resolute 4FL directly to the tank.
4. Add the rest of the carrier to obtain the final spray volume.
5. For tank mixing instructions, refer to the section “**Mixing Order for Tank Mixtures.**”
6. Maintain vigorous agitation in the spray tank before and during the application. This will ensure a well-mixed spray suspension. If Resolute 4FL was mixed with fertilizer in the spray tank, the fertilizer may aid resuspension of Resolute 4FL if agitation is disrupted. However, it is recommended that the entire tank be used before stopping agitation.
7. A spray colorant may be used with Resolute 4FL to mark areas as they are treated. This will improve application accuracy by minimizing swath skips and overlaps.
8. Thoroughly clean the sprayer after use by flushing the system with water containing a detergent.
9. Refer to the **Pesticide Disposal** section of this label for waste disposal. Do not allow spray suspension to dry in the tank.

#### TANK MIXING RESOLUTE 4FL

Resolute 4FL may be tank mixed with certain other EPA-registered herbicides to provide a broader spectrum of weed control or to control emerged weeds. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. 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.

Before tank mixing pesticides, test compatibility by mixing the products in a small container first. See the **Compatibility Test** section.

## COMPATIBILITY TEST

Before mixing Resolute 4FL with other pesticides in the spray tank, test for compatibility by mixing all components (carrier and pesticide products) in an appropriate container in proportionate quantities. For example, 1 qt would be 1/100 the volume of a 25 gal/A spray rate. At 1.0 lb/A, the Resolute 4FL rate would be proportional to 6 ml per quart. Add approximately 1 teaspoon to a quart of water. (See following table.)

### Amount of Component to Add to One Quart of Spray Carrier (Assuming Carrier Volume of 25 gal/A)

Component Formulations	Rate Per		Level Teaspoons
	Acre	1,000 sq ft	
Resolute 4FL	21.0 fl oz	0.5 fl oz	1.0
Dry Tank-Mix Partners	1.0 lb	0.4 oz	1.5
Liquid Tank-Mix Partners	1.0 pt	0.4 fl oz	0.5

If components do not ball-up or form flakes, sludge, gels, oily films, or layers, then the mixture is compatible. Let the mixture stand for 15 minutes. Incompatibility will usually occur within 5 minutes after mixing. If components are not compatible, use a compatibility agent and rerun the test to determine if the mixture is suitable. If the components are still not compatible, do not tank mix.

## MIXING ORDER FOR TANK MIXTURES

**Notes:** (1) When mixing Resolute 4FL with other components (carrier and partner pesticide products), allow products to completely dissolve between steps. (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 products to disperse before adding any other tank-mix partners.
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 Resolute 4FL, other flowable liquids (FL) or suspension concentrates (SC).
5. Add emulsifiable concentrates (EC) last.

## APPLICATION

Apply Resolute 4FL in a minimum of 20 gal/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 handheld wand designed for herbicide or insecticide application will provide the best results. Select nozzle pressure and gallonage to provide complete coverage.

## SPECIFIC USE DIRECTIONS

### ESTABLISHED TURF

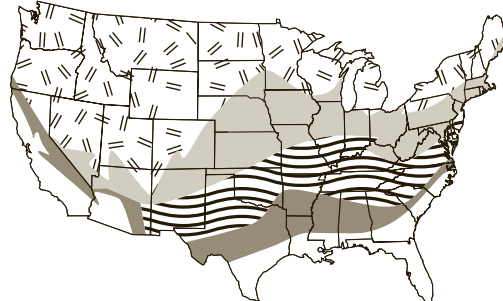
Resolute 4FL is a selective preemergence herbicide that, when properly applied, will control certain grass and broadleaf weeds in established turf-grasses including:

- Golf courses **excluding** putting greens
- Lawns
- Sod nurseries

The maximum amount of Resolute 4FL that may be applied per year is given for each turfgrass species in the **Annual Use Rates** section of this label.

For optimum weed control, Resolute 4FL should be activated by at least 0.5 inch of rainfall or irrigation before weed seeds germinate and within 14 days following application. See the map below for approximate crabgrass seed germination dates.

### Crabgrass Seed Germination Dates



### Approximate Date

-  After May 30
-  After May 10
-  After April 20
-  After March 20
-  January 1 to March 20

### Use Precautions and Restrictions - Turfgrass: Golf Courses, Lawns, and Sod Nurseries

1. Do not apply Resolute 4FL to areas where dichondra, colonial bentgrass, velvet bentgrass or annual bluegrass (*Poa annua*) are desirable species.
2. Do not cut (harvest) treated sod before 90 days after application. To avoid turfgrass injury, do not apply to newly set sod until the sod has rooted and exposed edges have filled in.
3. To avoid turfgrass injury do not apply Resolute 4FL to turf stressed by conditions such as drought, low fertility, or pest damage.
4. Disturbing the herbicide barrier with cultural practices such as disking may result in reduced weed control.
5. **Do not apply Resolute 4FL to golf course putting greens.**
6. If you consistently mow creeping bentgrass at a height of less than 0.5 inch do not apply Resolute 4FL.

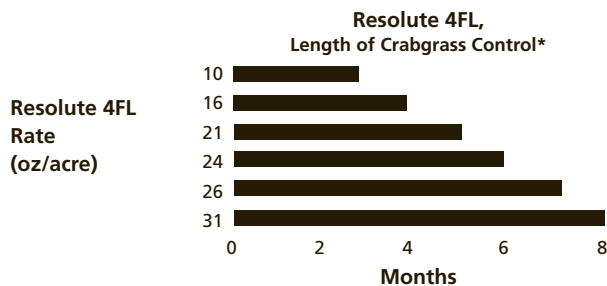
### Application Timing And Rate - Turfgrass

Resolute 4FL may be applied as a single application or in sequential applications to control weeds germinating throughout the year. All applications must be made before target weeds germinate because **Resolute 4FL will not control weeds that have already emerged.**

The amount of Resolute 4FL to apply depends upon:

1. the length of residual weed control desired (the higher the application rate, the longer the control),
2. the turf species,
3. the maximum amount which can be applied to the turf species per calendar year.

(See the next 2 tables.)



\*Length of control varies by region. This table is an average.

## Annual Use Rates – Turfgrass

Resolute 4FL can be applied to the turfgrass species listed in the following table. **Restriction:** Do not apply more than the highest rate listed for each species in a calendar year.

Maximum Application Rate of Resolute 4FL Per Calendar Year by Turf Species		
Turf Species	fl oz Product /A	fl oz Product /1,000 sq ft
Bermudagrass <sup>2</sup> Bahia grass Centipedegrass Kikuyugrass Seashore Paspalum St. Augustinegrass <sup>3</sup> Tall Fescue (including turf-type) Zoysiagrass	21-48 <sup>1</sup>	0.5-1.1
Buffalograss Kentucky Bluegrass Perennial Ryegrass	10-30 <sup>1</sup>	0.23-0.70
Fine Fescue	10-24 <sup>1</sup>	0.23-0.55
Creeping Bentgrass (0.5 inch or more in height <sup>4</sup> )	10-21 <sup>1</sup>	0.23-0.48

<sup>1</sup>Resolute 4FL may be applied more than once a year as long as the total amount applied is not greater than the maximum application rate for each turf species. All applications must be made before weed seeds germinate.

<sup>2</sup>May be used on newly sprigged or plugged bermudagrass at rates not to exceed 17 fl oz/A (0.39 fl oz/1,000 sq ft). Newly sprigged or plugged bermudagrass stolon rooting may be temporarily inhibited.

<sup>3</sup>Use an initial rate of 16-32 fl oz/A per application.

<sup>4</sup>To avoid grass injury, do not apply Resolute 4FL to creeping bentgrass mowed at less than 0.5 inch in height.

## Weeds Controlled

When used as directed in this label, Resolute 4FL will control the following weeds:

Barnyardgrass	Kochia
Bluegrass, Annual ( <i>Poa annua</i> ) <sup>1</sup>	Lambsquarters, Common
Carpetweed	Lovegrass
Chickweed, Common <sup>2</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>4</sup>
Foxtails, Annual	Shepherdspurse <sup>2</sup>
Goosegrass <sup>5</sup>	Signalgrass, Broadleaf
Henbit <sup>2</sup>	Speedwell, Persian
Itchgrass	Sprangletop
Johnsongrass (from seed)	Spurge, Prostrate
Junglerice	Witchgrass
Knotweed <sup>2</sup>	Woodsorrel, Yellow (from seed)

<sup>1</sup>In those areas where *Poa annua* is a winter annual, apply Resolute 4FL (see rate table) in August or September to established, non-overseeded turf before *Poa annua* seeds germinate. These timings are approximate. Consult State Extension Service for more specific timing for your area. Also see the section of this label ***Poa annua* Control in Established Bermudagrass Overseeded with Perennial Ryegrass**

<sup>2</sup>To control this weed, apply Resolute 4FL in late summer, fall, or winter before weeds germinate.

<sup>3</sup>**Fall Applications for Spring Crabgrass Control in Cool-Season Grasses:** In those areas where the ground freezes in the winter, Resolute 4FL can be applied in the fall at rates of 21-24 fl oz/A after soil temperatures fall below 50°F, but before the ground freezes. This application will control crabgrass the following spring.

<sup>4</sup>Suppression only.

<sup>5</sup>In many areas a single application of 21-48 fl oz/A of Resolute 4FL will control goosegrass. However, under heavy goosegrass pressure and/or an extended growing season, weed control will be most effective by making an initial application of 21-26 fl oz/A followed by a second application 60-90 days later. **Note:** Do not exceed the maximum rate for the turf species listed in the Maximum Application Rates Table.

## When to Apply Resolute 4FL After Overseeding Turf

Injury to desirable seedlings is likely if Resolute 4FL is applied before the secondary roots of seedlings are in the second inch of soil, not thatch plus soil. To reduce the potential to injure overseeded turf, wait 60 days after seeding or until after the second mowing, whichever is longer, before applying Resolute 4FL.

## When to Overseed After Application - All States\*

Resolute 4FL will inhibit the development of turfgrass species overseeded too soon after application. Follow rates and intervals in the table below for best overseeding/reseeding results.

\*Note: See exceptions for *Poa annua* Control in Established Bermudagrass Overseeded with Perennial Ryegrass below.

Amount of Resolute 4FL  fl oz Product /A	Interval (Months Before Overseeding)*		
	North	Transition	South
16	4	4	4
21	5	4	4
24	6	5	5
26	---	6	6
31	---	7	7
36	---	---	9
42	---	---	10
48	---	---	12

## *Poa annua* Control in Established Bermudagrass Overseeded with Perennial Ryegrass (Arizona, California, Nevada and Texas Only)

Use on golf courses (excluding golf course putting greens), lawns, and sod nurseries when overseeding with perennial ryegrass. (Minimum seeding rate of 350 lb/A)

## How Much Resolute 4FL and When to Apply

Amount to Apply	When to Apply	Expected Control	Use Precautions and Restrictions
12-21 fl oz /A	6-8 weeks before ryegrass over- seeding  <b>second application:</b> 4-8 weeks after overseeding or when perennial ryegrass roots are in the second inch of soil	1 application for 70% or greater control of <i>Poa annua</i>  second application may enhance control	1. Some seedling mortality and temporary reduction in root growth of new seedlings may occur.  2. To reduce the potential for seedling mortality maintain a moist seed- bed with light, frequent irrigation.  3. Make no more than 2 applications per year for this use, and do not exceed a total of 27 fl oz/A per year.  4. Do not make a second application if any injury to the ryegrass is observed after the first application.  5. Do not make a second application unless the product was first applied before overseeding.

### Control of *Poa annua* in Perennial Ryegrass Overseedings (Alabama, Louisiana, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee Only)

Use on golf courses (excluding golf course putting greens) when overseeding with perennial rye grass only (minimum seeding rate of 350 lb/A.)

#### How Much Resolute 4FL and When to Apply

Amount to Apply	When to Apply	Expected Control	Use Precautions
12-21 fl oz /A	8-10 weeks before ryegrass overseeding	70% or greater	<p>Some seedling mortality and temporary reduction in root growth of new seedlings may occur.</p> <p>To reduce the potential for seedling mortality maintain a moist seedbed with light, frequent irrigation.</p> <p>To maximize seedling establishment, use lower rate and/or the maximum time interval before overseeding. To maximize <i>Poa annua</i> control, use higher rate and shorter time interval before overseeding.</p>

### CONTAINER, FIELD-GROWN, AND LANDSCAPE ORNAMENTAL PLANTINGS (INCLUDING CHRISTMAS TREE FARMS)

#### Application, Timing, and Information

##### Resolute 4FL:

- 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 applied to soil free of clods, weeds, and debris such as leaves and mulch.
- 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 to 2 inches) mechanical incorporation.

#### Use Precautions

##### To reduce injury potential:

- Direct application of Resolute 4FL 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 Resolute 4FL may injure new growth of desirable plants, however, these effects are temporary. To reduce the possibility of injury at this time, wait to apply Resolute 4FL 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 apply overhead irrigation to the foliage to wash Resolute 4FL from plant surfaces onto soil (watering the foliage of plants before application may improve the washing process).

### Ornamental and Christmas Tree Farms - Application Sites and Instructions

Site	Application Instructions
Newly-Transplanted Container or Field Nursery Stock	<ol style="list-style-type: none"> <li>Delay application until soil has settled around transplants.</li> <li>Water transplants thoroughly before application.</li> <li>Apply after cuttings form roots and are established.</li> <li>To avoid inhibition of the tissue union, apply before budding/grafting or after buds/grafts have taken.</li> </ol>
Established Container, Field Nursery Stock, or Landscape Plants	<ol style="list-style-type: none"> <li>Apply at any time as a broadcast, over-the-top, or directed spray.</li> </ol>
Landscape (or Ornamental) Plantings	<ol 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> </ol>
Bare Ground Application for Container Placement	<ol style="list-style-type: none"> <li>Apply to soil (including mulch, gravel, wood chips, or other permeable base) upon which containerized ornamentals are placed.</li> <li>After Resolute 4FL is applied, perform shallow cultivation or hand weeding only, to avoid disturbing the herbicide barrier.</li> </ol>
In Shadehouses and Uncovered Polyhouses	<ol style="list-style-type: none"> <li>After Resolute 4FL is applied, uncovered polyhouses must remain open for at least 7 days and ornamentals must receive 2 irrigations totaling at least 1/2 inch of water before covering.</li> </ol>
Ornamental Bulbs and Perennial Wildflower Plantings	<ol style="list-style-type: none"> <li>Resolute 4FL may be applied to bulbs or perennial wildflower species listed in the section. 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> </ol>

#### How Much Resolute 4FL and When to Apply – Ornamentals

Amount to Apply (Broadcast)*	When to Apply	Comments/Instructions
21-48 fl oz /A or 0.5-1.1 fl oz/ 1,000 sq ft	In fall or spring before weeds germinate or after weeds are removed.	<ol style="list-style-type: none"> <li>Use the higher rate for longer control.</li> <li>Resolute 4FL may be applied more than once per year as long as the total amount of product applied does not exceed 48 fl oz/A per year.</li> </ol>

**\*NOTE:** For band application, calculate amount per acre:

Band width in inches  $\times$  broadcast rate = amount to apply/acre of field  
 Row width in inches

#### Equivalent Measurements for Resolute 4FL

fl oz /A	fl oz / 1,000 sq ft	Approximate Equivalent – Tablespoons/1,000 sq ft
21	0.5	1.0
31	0.7	1.5
42	1.0	2.0
48	1.1	2.25

### Tank Mixtures for Use on Container, Field Grown and Landscape Ornamentals

Resolute 4FL 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 Resolute 4FL are for use only in states where the tank-mix partner(s), application site and intended use pattern are registered.

Follow the label directions of the tank-mix partner(s) for application rates, timing, weeds controlled, tolerant ornamentals, and specific use precautions and/or restrictions. Before combining a tank-mix partner in the spray tank, test for compatibility as described on this label.

## Tank-Mix Partners for Resolute 4FL on Ornamentals

Product	Precautions/Instructions
Goal® (use on conifers only)	1. Mix with Resolute 4FL for postemergence control of certain broadleaf weeds including malva and filaree.
Gallery®, Princep®, Pennant Magnum®	1. See product labels for weed spectrum and tolerant ornamentals.
Roundup® or other glyphosate-based products, Finale®	1. These nonselective tank-mix herbicides control many emerged annual broadleaves and grasses. 2. Take extreme care 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. 3. 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.

### Tolerant Ornamental Species

Resolute 4FL will not harm most trees, shrubs, vines and flowers. The species listed below in Table 1 are tolerant to Resolute 4FL. Resolute 4FL may be used for application, except in CA, to the species in Table 2. Resolute 4FL may be applied over the top of the listed species. The species that are not tolerant to Resolute 4FL when grown in containers are indicated.

When plants are under stress (such as heat, drought, or frost damage), some cultivars of listed plants may be sensitive to Resolute 4FL.

**Table 1. Tolerant Ornamental Species - All States**

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>Acer saccharum</i>	Sugar maple**
<i>Achillea</i> spp.	Yarrow: King Edward
<i>Actinidia chinensis</i>	Kiwi*
<i>Agapanthus africanus</i>	Lily-of-the-Nile (African Lily)
<i>Agastache rupestris</i>	Sunset Hyssop
<i>Aquilegia</i> spp.	Aquilegia: Red and Gold
<i>Arctostaphylos densiflora</i>	Vine Hill Manzanita
<i>Arctotheca calendula</i>	Cape Weed
<i>Aristida stricta</i>	Wiregrass
<i>Artemisia</i> spp.	Wormwood; Silver Mound, Castle
<i>Aspidistra elatior</i>	Cast-iron plant
<i>Aucuba japonica</i>	Japanese Aucuba
<i>Begonia</i> spp.	Fibrous Begonia: Hardy Grandis
<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>Brassica oleracea</i>	Wild Cabbage
<i>Buddleia</i> spp.	Butterfly-Bush, Dwarf Blue; Royal Red
<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>Centaurea gymnocarpa</i>	Dusty Miller
<i>Chamaecyparis pisifera</i>	False Cypress
<i>Cleyera japonica</i>	Cleyera
<i>Citrus</i> spp.	Citrus species*
<i>Cornus alernifolia</i>	Pogoda Dogwood
<i>Cornus florida</i>	Flowering Dogwood
<i>Cornus stolonifera</i>	American Dogwood

Scientific name	Common name
<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 glacophylla</i>	Gray-leaf 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>Dendranthemum</i> spp.	Chrysanthemum
<i>Diascia intergerrima</i>	Twinspur
<i>Digitalis</i> spp.	Foxglove
<i>Dodonea 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 kiautschovicka</i>	Spreading Euonymus
<i>Euonymus macrophylla</i>	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>Gypsophila</i> spp.	Baby's Breath
<i>Hedera helix</i>	English Ivy
<i>Hemerocallis</i> spp.	Daylily: Aztec Gold, Stella De Oro, Tender Love
<i>Hibiscus</i>	Rose of Sharon**
<i>Hibiscus Rosa-sinensis</i>	Chinese Hibiscus**
<i>Hosta</i> spp.	Hosta, Plantain Lily (Fragrant)
<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>Lantana</i> spp.	Lantana
<i>Leucanthemum maximum</i>	Shasta Daisy
<i>Ligustrum amurense</i>	Amur Privet
<i>Ligustrum japonicum</i>	Japanese Privet
<i>Ligustrum lucidum</i>	Glossy Privet (Wax-Leaf)
<i>Lilium</i> spp.	Lily: Jazz
<i>Liriope muscari</i>	Big Blue Lillyturf
<i>Liriope spicata</i>	Liriope, Creeping
<i>Lobelia erinus</i>	Lobelia
<i>Lonicera japonica</i>	Japanese Honeysuckle
<i>Lonicera tatarica</i>	Tatarian Honeysuckle
<i>Magnolia</i> spp.	Magnolia species**
<i>Maleophora 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>Oenothera fruticosa</i>	Narrow-leaf primrose
<i>Oenothera pallid</i>	Pale Evening Primrose

continued...

**Table 1. Tolerant Ornamental Species - All States (continued)**

Scientific name	Common name
<i>Olea europaea</i>	Olive*
<i>Ophiopogon japonicus</i>	Mondo Grass**
<i>Origanum libanoticum</i>	Origanum*
<i>Osteospermum fruticosum</i>	Trailing African Daisy
<i>Oxydendrum arboreum</i>	Sourwood
<i>Perovskia atriplicifolia</i>	Russian Sage
<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 compacta</i>	Andromeda
<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
<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 borealis</i>	Northern Red Oak
<i>Quercus rubra</i>	Oak species
<i>Raphiolepis indica</i>	Indian Hawthorne
<i>Rhamnus smithii</i>	Buckthorn
<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>Ruscus hypophyllum</i>	Butcher's Broom
<i>Salvia daghestanica</i>	Sage*
<i>Santolina virens</i>	
<i>Sedum</i> spp.	Stonecrop
<i>Spirea japonica</i>	Spirea
<i>Syzygium paniculatum</i>	Japanese Boxcherry
<i>Tagetes</i> spp.	Marigold
<i>Trachelospermum jasminoides</i>	Star Jasmine
<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

Scientific name	Common name
<i>Tulipa</i> spp.	Tulip species
<i>Viburnum japonicum</i>	Japanese Viburnum
<i>Viburnum lantana</i>	Wayfaring Tree
<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 trilobium</i>	Cranberry Bush
<i>Viburnum wrightii</i>	Leatherleaf Viburnum
<i>Vinca major</i>	Vinca
<i>Vinca minor</i>	Dwarf Periwinkle
<i>Viola x wittrockiana</i>	Pansy
<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
<i>Zauschneria californica</i>	California Fushia

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

\*\*Not for use on container grown plants.

\*\*\*Use on landscape ornamentals only.

**Table 2. Tolerant Ornamental Species/Varieties - All States Except CA**

Scientific name	Common name
<i>Abelia grandiflora</i>	Abelia: Sherwood
<i>Agapanthus orientalis</i>	
<i>Akebia quintata</i>	Five-Leaf or Chocolate Vine
<i>Allium cernuum</i>	Lady's Leek, Nodding Onion
<i>Anemone hybrida</i>	Japanese Anemone
<i>Aster</i> spp.	Aster: Bonny Blue, Purple Dome
<i>Aster X frikartii</i>	
<i>Athyrium filix-femina</i>	Lady Fern; Fern Lady
<i>Bergenia cordifolia</i>	
<i>Boltonia asteroides</i>	Snowbank
<i>Bougainvillea</i> spp.	Bougainvillea
<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>Crocasmia</i> spp.	Lucifer
<i>Delosperma</i> spp.	Cooperi Pink
<i>Delphinium</i> spp.	Larkspur; Blue Elf
<i>Dianthus deltoides</i>	Dianthus, Maiden Pinks 'Zing'
<i>Dianthus gratianopolitanus</i>	Cheddar Pink
<i>Echinacea purpurea</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>Helianthemum</i> spp.	Sunrose
<i>Heucherella</i> spp.	Coral Bell; Bridget Bloom
<i>Hibiscus</i> spp.	Mallow; Disco Belle White
<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

continued...

**Table 2. Tolerant Ornamental Species/Varieties - All States Except CA (continued)**

Scientific name	Common name
<i>Juniperus davurica</i>	Parsoni
<i>Lagerstromia indica x 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>Liriope muscari</i> var. <i>variegata</i>	Liriope, Variegated
<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>Physostegia virginiana</i>	Dragonhead, False; Vivid
<i>Quercus shumardii</i>	Oak, Shumard's Red
<i>Raphiolepis umbellata</i>	Yedda Hawthorne
<i>Rhododendron</i>	'Delaware Valley White'
(including Azalea)	'Flame Creeper'
	'Girard Crimson'
	'George L. Tabor'
	'Wakeiebisu'
	'White Gumpo'
<i>Rudbeckia</i> spp.	Black-Eyed Susan: Goldstrum
<i>Saxifraga</i> spp.	Saxifrage; Purple Dome
<i>Scabiosa</i> spp.	Pincushion Flower
<i>Sedum cauticola</i>	Stonecrop; Lidakense
<i>Sedum dasyphyllum</i>	Stonecrop
<i>Sedum spurium</i>	Stonecrop; Dragon's Blood
<i>Spiraea bumalda</i>	Spirea: Anthony Waterer
<i>Syzygium paniculatum</i>	Australian Brushcherry
<i>Teucrium</i> spp.	Germander
<i>Thalictrum dipterocarpum</i>	Meadow Rue
<i>Viburnum suspensum</i>	Arrowwood Viburnum

\*\*Not for use on container grown plants.

#### NEW PLANTINGS, REPLANTING AND ROTATIONAL PLANTINGS

Nursery, landscape, or non-cropped land areas treated with Resolute 4FL 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, but do not apply more than 48 fl oz/A per year.

#### VEGETATION MANAGEMENT

Resolute 4FL 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:
  - 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

#### Weeds Controlled – Vegetation Management

When used as directed in this label Resolute 4FL will control the following weeds:

Barnyardgrass	Kochia
Bluegrass, Annual ( <i>Poa annua</i> ) <sup>1</sup>	Lambsquarters, 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 Resolute 4FL 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 48 fl oz/A per year (1.5 lb ai/A). To control weeds, all applications must be made before weed seeds germinate.

#### Application Timing and Information – Vegetation Management

##### Resolute 4FL:

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

#### Use Precautions – Vegetation Management

To reduce injury potential:

1. Direct application of Resolute 4FL 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 Resolute 4FL may temporarily injure new growth of desirable plants. To reduce the possibility of injury at this time, wait to apply Resolute 4FL 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.
2. After application (immediately for deciduous plants), apply overhead irrigation to wash Resolute 4FL from plant surfaces onto soil. Watering plants before application may improve the washing process.

#### How Much and When to Apply – Vegetation Management

Amount to Apply (Broadcast)	When to Apply	Comments/Instructions
21-48 fl oz/A or 0.48-1.1 fl 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>• Resolute 4FL may be applied more than once per year as long as the total amount of product applied does not exceed 2.3 lb/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 Resolute 4FL

fl oz/A	fl oz/1,000 sq ft	Approximate Equivalent Tablespoons/1,000 sq ft
21	0.48	0.96
32	0.72	1.43
42	0.96	1.91
48	1.10	2.2

## Application Sites and Use Precautions – Vegetation Management

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 – Vegetation Management

Resolute 4FL 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 Resolute 4FL 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 Mixing and Application

### Tank Mix Partners for Resolute 4FL – Vegetation Management

Product	Precautions/Instructions
Goal® (use on conifers only)	<ul style="list-style-type: none"> <li>Mix with Resolute 4FL 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>
A glyphosate-based product, 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>

## Tolerant Ornamental Species\* - Vegetation Management

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

Resolute 4FL will not harm most trees, shrubs, vines, and flowers. The species listed below in Table 4 are tolerant to Resolute 4FL. Resolute 4FL is approved for application, except in California, to the species in Table 5. Resolute 4FL 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 Resolute 4FL.

**Table 3: - Tolerant Ornamental Species\* - Vegetation Management - All States**

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**
<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

continued...

**Table 3: - Tolerant Ornamental Species\* - Vegetation Management - All States (*continued*)**

Scientific name	Common name
<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>Lirope 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 elliotii</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
<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>Raphiolepis indica</i>	Indian Hawthorne
<i>Rhododendron</i> (including <i>Azalea</i> )	'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

Scientific name	Common name
<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 4: - Tolerant Ornamental Species\* - Vegetation Management - 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 carpatia</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>Crocsmia</i> spp.	Lucifer
<i>Delosperma</i> spp.	Cooperi Pink
<i>Delphinium</i> spp.	Larkspur; Blue Elf
<i>Dianthus deltoides</i>	Dianthus, Maiden Pinks 'Zing'
<i>Dianthus gratianopolitanus</i>	Cheddar Pink
<i>Echinacea pupurea</i>	Coneflower, Purple; Magnus

*continued...*

**Table 4: - Tolerant Ornamental Species\* - Vegetation Management - All States Except CA (continued)**

Scientific name	Common name
<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>Liriodendron muscari</i> var. <i>variegata</i>	Liriodendron, Variegated
<i>Liriodendron spicata</i>	Liriodendron, 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>Raphiolepis umbellata</i>	Yedda Hawthorne
<i>Rhododendron</i> (including azalea)	'Delaware Valley White', 'Flame Creeper', 'Girard Crimson', 'George L. Tabor', 'Wakeiebisu, White Gumpo
<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>	Spirea: Anthony Waterer
<i>Syzygium 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.

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

### Resolute 4FL

1. Provides residual preemergence weed control in conifer and hardwood seedling nurseries.
2. 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.
3. 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
	fl oz/A	fl oz/1,000 sq ft		
Conifer and Hardwood Seedling Nurseries	21 - 48	0.48 – 1.1	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 lb/A per year.</li> </ul>
Southern Pine Seedbeds	16	0.36	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 gal of water per treated area.</li> <li>• After application, sprinkler irrigate beds with approximately 1/2 inch of water.</li> </ul>
Hardwood Seedbeds: Oak ( <i>Quercus</i> spp.), Sweetgum, Green Ash	16 -32	0.36 – 0.72	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 – Vegetation Management

Resolute 4FL 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 Resolute 4FL 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 – Vegetation Management

### Tank Mix Partner for Resolute 4FL – Conifer Seedling Nurseries

Product	Precautions/Instructions
Goal (use on conifers only)	<ul style="list-style-type: none"><li>Mix with Resolute 4FL for postemergence control of certain broadleaf weeds including malva and filaree.</li></ul>

#### 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
	fl oz/A	fl 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	21 - 48	0.48 – 1.10	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 lb/A per year.</li></ul>

Resolute 4FL 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 Resolute 4FL are for use only in states where the tank mix partner(s) are registered for the application site.

#### Tank Mix Partners with Resolute 4FL – Vegetation Management

Products	Comments
A glyphosate-based product <sup>1</sup> , Gramoxone®, Reward, Princep, Vanquish®, diuron-based products <sup>1</sup> , Finale, Gallery, Garlon®, Goal, Krovar IVM, 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 Resolute 4FL 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.

## STORAGE AND DISPOSAL

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

#### Pesticide Storage

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

#### Pesticide Disposal

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

#### Container Handling (less than 5 gallons)

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of container in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### Container Handling (Bulk/Mini-bulk)

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 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 and disposal. Repeat this procedure two more times. Then offer for recycling if available 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.

#### Chemigation

Do not apply this product through any type of irrigation system unless instructed otherwise in this label.

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