# 03/20/2006





U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (H7505C) 401 "M" St., S.W. Washington, D.C. 20460

EPA Req. Number: 34704-915

Term of Issuance:

Conditional

Date of Issuance:

MAR 2 0 2006

NOTICE OF PESTICIDE:

X Registration

Reregistration

Name of Pesticide Product:

Prodiacade Herbicide

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Loveland Products, Inc.

P.O. Box 1286

Greeley, Colorado 80632-1286

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Add the phrase "EPA Registration No.34704-915" to the label before you release the product for shipment.

COMMENTS CONTINUED ON PAGE 2 OF THIS NOTICE OF REGISTRATION

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product under the enclosed stamped copy of the label constitutes acceptance of these conditions.

Enclosure

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

Signature of Approving Official:

Joanne J. Miller

MAR 2 0 2006

EPA Form 8570-6

Page 2 EPA Registration No. 34704-915

- 2. Delete the "Chemigation" section that appears in the "Storage and Disposal" box.
- 3. Delete the heading "Specific Use Directions" and revise the "Use Precautions" statement to read: "Use Restrictions" on the map page.
- 4. The label must show the "Net Contents: \_\_\_\_\_", in lbs. of product in the product package on the front panel.
- 5. Delete the claim "Product of United Kingdom", or revise to reflect location where this product is manufactured.
- 6. Paginate the revised accepted labeling under this "Notice of Pesticide Registration".
- 7. Submit one (1) copy of the final printed labeling before you release this product for shipment.
- 8. Submit and/or cite all data required for the registration of this product when the Agency requires all registrants of similar products to submit data; and submit acceptable responses required for reregistration of this product under FIFRA, section 4. A stamped copy of the label is enclosed for your records.

Enclosure

# **Prodiacade 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
- hardwood seedling nurseries
- established perennial and wildflower plantings
- Christmas tree farms

ACCEPTED with COMMENTS In EPA Letter Dated:

MAR 2 0 2006 Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No

34704-915

Active Ingredient:	••
Prodiamine*	40.7%
Other Ingredients:	59.3%
Total:	
*CAS No. 29091-21-2	
Prodiacade contains 4 pounds active ingredi	ent per gallon.

# KEEP OUT OF REACH OF CHILDREN. CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 34704-Product of United Kingdom Formulated in the USA EPA Est.

Net Contents: 1 US Gallon



	FIRST AID
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>
	Have person sip a glass of water if able to swallow.
İ	<ul> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> </ul>
	<ul> <li>Do not give anything by mouth to an unconscious person or convulsing person.</li> </ul>
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If inhaled	Move person to fresh air.
	If person is not breathing, call 911 or an ambulance, then give
	artificial respiration, preferably mouth-to-mouth if possible.
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If on skin or	Take off contaminated clothing.
clothing	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
Have the produ	act container or label with you when calling a poison control center or
	g for treatment.
FOR A M	EDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-301-7976.

# PRECAUTIONARY STATEMENTS

# **Hazards to Humans and Domestic Animals CAUTION**

May be harmful if swallowed, absorbed through skin, or inhaled. Avoid breathing vapor. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact, while mixing or handling the concentrated material, 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, 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 CRF 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.

#### **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.

#### **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 indirectly 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 natural rubber > 14 mils or neoprene rubber > 14 mils or nitrile rubber > 14 mils
- Shoes plus socks

#### STORAGE AND DISPOSAL

#### Storage

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

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.

### **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 (Disposable Containers)**

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of container in a sanitary landfill, or incinerate, or burn if allowed by state and local authorities. Stay out of smoke from burning container.

### (Optional text for refillable containers)

This is a refillable container that must be returned to an authorized Loveland Products facility for refilling or disposal. For more information contact Loveland Products at 970-356-4400.

#### Chemigation

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

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC -1-800-424-9300.

#### WHERE TO USE

Prodiacade 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
- hardwood seedling nurseries
- established perennial and wildflower plantings
- Christmas tree farms

#### HOW PRODIACADE WORKS

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

#### **USE PRECAUTIONS**

- 1. Do not graze or feed livestock forage cut from areas treated with Prodiacade.
- 2. Follow all applicable directions, restrictions, and precautions on the labels of EPA-registered tank mix partners.
- 3. Do not blend Prodiacade 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.

# MIXING AND APPLICATION PROCEDURES MIXING PRODIACADE ALONE

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

- 1. Fill the spray tank ¼ full with clean water only.
- 2. Start agitation and check to ensure it is working properly.
- 3. For tank mixing instructions, refer to the section "Mixing Order for Tank Mixtures."
- 4. Maintain vigorous agitation in the spray tank before and during the application. This will ensure a well-mixed spray suspension. If Prodiacade was mixed with fertilizer in the spray tank, the fertilizer may aid resuspension of Prodiacade if agitation is disrupted. However, it is recommended that the entire tank be used before stopping agitation.
- 5. A spray colorant may be used with Prodiacade to mark areas as they are treated. This will improve application accuracy by minimizing swath skips and overlaps.
- 6. Thoroughly clean the sprayer after use by flushing the system with water containing a detergent.
- 7. Refer to the **Pesticide Disposal** section of this label for waste disposal. Do not allow spray suspension to dry in the tank.

#### TANK MIXING PRODIACADE

Prodiacade 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 refer to 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 Prodiacade in a tank mixture with other pesticides, follow restrictions and precautions on the labels of the products used.

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

#### **COMPATIBILITY TEST**

Before mixing Prodiacade 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 25 gals./A spray rate. At 1.0 lb./A, the Prodiacade 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 gals/A)

	Rate Per			
Component Formulations	Acre	1,000 sq. ft.	Level Teaspoons	
Prodiacade	21.0 ozs.	0.5 oz.	1.0	
Dry Tank Mix Partners	1.0 lb.	0.4 oz.	1.5	
Liquid Tank Mix Partners	1.0 pt.	0.4 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 Prodiacade 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 the 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 Prodiacade, other flowable liquids (FL) or suspension concentrates (SC).
- 5. Add emulsifiable concentrates (EC) last.

#### APPLICATION

Apply Prodiacade 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 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

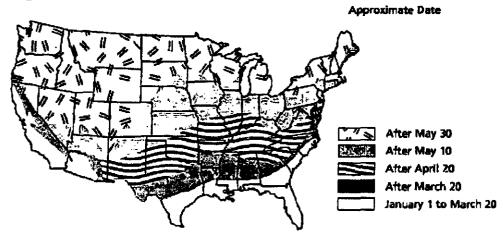
Prodiacade is a selective preemergence herbicide that, when properly applied, will control certain grass and broadleaf weeds in established turfgrasses including:

- Golf courses excluding putting greens
- Lawns
- Sod nurseries

The maximum amount of Prodiacade 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, Prodiacade 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**



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

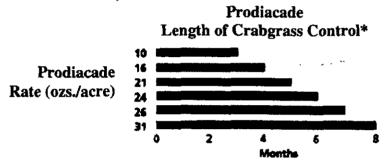
- 1. Do not apply Prodiacade to areas where dichondra, colonial bentgrass, velvet bentgrass or annual bluegrass (*Poa annua*) are desirable species.
- 2. Do not cut (harvest) treated sod before 90 days after application. To avoid turfgrass injury, do not apply to newly set sod until the sod has rooted and exposed edges have filled in.
- 3. To avoid turfgrass injury do not apply Prodiacade 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 Prodiacade to golf course putting greens.
- 6. If you consistently mow creeping bentgrass at a height of less than 0.5 inch do not apply Prodiacade.

## Application Timing and Rate - Turfgrass

Prodiacade 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 Prodiacade will not control weeds that have already emerged.

The amount of Prodiacade 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.)



<sup>\*</sup>Length of control varies by region. This table is an average.

## Annual Use Rates - Turfgrass

Prodiacade can be applied to the turfgrass species listed in the following table. Note: Do not apply more than the highest rate listed for each species in a calendar year.

Maximum Application Rate of Prodiacade Per Calendar Year by Turf Species		
Turf Species	Oz. Product/A	Oz. Product/1,000 sq. ft.
Bermudagrass <sup>2</sup>	21-48	0.5 – 1.1
Bahiagrass		
Centipedegrass		
Kikuyugrass		
Seashore Paspalum		
St. Augustinegrass <sup>3</sup>		
Tall fescue (including turf-		
type)		
Zoysiagrass		
Buffalograss	10-30 <sup>1</sup>	0.23 – 0.70
Kentucky Bluegrass	10 00	0.25
Perennial Ryegrass		
Fine Fescue	10-24 <sup>1</sup>	0.23 - 0.55
C and Day (O.5	10.01	0.00
Creeping Bentgrass (0.5 inch or more in height <sup>4</sup> )	10-21	0.23 - 0.48

<sup>1</sup> Prodiacade 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 ozs./A (0.39 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 oz./A per application.

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

#### Weeds Controlled

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

Barnyardgrass

Bluegrass, Annual (Poa annua)

Carpetweed

Chickweed, Common<sup>2</sup>

Chickweed, Mouseear (from seed)

Crabgrass (Large, Smooth)<sup>3</sup>

Crowfootgrass

Cupgrass, Woolly

Foxtails, Annual

Goosegrass<sup>5</sup>

Henbit<sup>2</sup>

Itchgrass

Johnsongrass (from seed)

Junglerice

Knotweed<sup>2</sup>

Kochia

Lambsquarters, Common

Lovegrass

Panicum, (Texas, Fall, Browntop)

Pigweed

Purslane, Common

Pusley, Florida

Rescuegrass<sup>4</sup>

Shepherdspurse<sup>2</sup>

Signalgrass, Broadleaf

Speedwell, Persian

Sprangletop

Spurge, Prostrate

Witchgrass

Woodsorrel, Yellow (from seed)

<sup>&</sup>lt;sup>1</sup> In those areas where *Poa annua* is a winter annual, apply Prodiacade (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 (AZ, CA, NV, and TX Only)

<sup>2</sup> To control this weed, apply Prodiacade 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, Prodiacade can be applied in the fall at rates of 21-24 ozs./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.

In many areas a single application of 21-48 ozs./A of Prodiacade 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 ozs./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 Prodiacade After Overseeding Turf

Injury to desirable seedlings is likely if Prodiacade 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 Prodiacade.

### When to Overseed After Application – All States

Prodiacade 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: In AZ, CA, NV, and TX the overseeding interval can be shorter in established bermudagrass that has been overseeded with perennial ryegrass. See the next section, Poa Annua Control in Established Bermudagrass Overseeded with Perennial Ryegrass (AZ, CA, NV, and TX only).

Amount of Prodiacade	Interval (Months Before Overseeding)*		Interval (Months Before (	
Ozs. Product/A	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 (AZ, CA, NV, and TX only)

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

How Much Prodiacade and When to Apply

Amount to		Expected	
apply	When to Apply	Control	Use Precautions
12-21 ozs./A*	6-8 weeds before	1 application	1. Some seedling mortality
	ryegrass overseeding	for 70% or	and temporary reduction
		greater	in root growth of new
	second application: 4-8	control of Poa	seedlings may occur.
	weeks after overseeding	annua second	2. To reduce the potential
	or when perennial	application	for seedling mortality
	ryegrass roots are in the	may enhance	maintain a moist seedbed
	second inch of soil	control	with light, frequent
			irrigation.
			3. Make no more than 2
		"	applications per year for
İ		, , , , , ,	this use, and do not exceed
•			a total of 27 ozs./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.

<sup>\*</sup>The amount of Prodiacade to apply depends upon: the length of residual control desired (the higher the application rate, the longer the control). Note: The higher the rate, the greater the potential for seedling mortality.

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

# Application, Timing, and Information

#### Prodiacade:

- 1. Will not control emerged weeds.
- 2. May be applied to newly-transplanted and established ornamentals as a broadcast or over-the-top spray.
- 3. Is most effective when applied to soil free of clods, weeds, and debris such as leaves and mulch.
- 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 to 2 inches) mechanical incorporation.

#### **Use Precautions**

### To reduce injury potential:

1. Direct application of Prodiacade 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 Prodiacade may injure new growth of desirable plants, however, these

effects are temporary. To reduce the possibility of injury at this time, wait to apply Prodiacade 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 apply overhead irrigation to the foliage to wash Prodiacade 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

Ornamental and Christmas Tree Farms – Application Sites and Instructions		
Site	Application Instructions	
Newly-Transplanted	1. Delay application until soil has settled around transplants.	
Container or Field	2. Water transplants thoroughly before application.	
Nursery Stock	3. Apply after cuttings form roots and are established.	
	4. To avoid inhibition of the tissue union, apply before	
	budding/grafting or after buds/grafts have taken.	
Established	1. Apply at any time as a broadcast, over-the-top, or directed	
Container, Field	spray.	
Nursery Stock, or		
Landscape Plants		
Landscape (or	1. Apply as a broadcast, over-the-top, or as a directed spray.	
Ornamental)	2. Delay applications to newly transplanted ornamentals until soil	
Plantings	has settled around transplants.	
Bare Ground	1. Apply to soil (including mulch, gravel, wood chips, or other	
Application for	permeable base) upon which containerized ornamentals are	
Container Placement	placed.	
	2. After Prodiacade is applied, perform shallow cultivation or	
	hand weeding only, to avoid disturbing the herbicide barrier.	
In Shadehouses and	1. After Prodiacade is applied, uncovered polyhouses must remain	
Uncovered	open for at least 7 days and ornamentals must receive 2 irrigations	
Polyhouses	totaling at least ½ inch of water before covering.	
Ornamental Bulbs	1. Prodiacade may be applied to bulbs or perennial wildflower	
and Perennial	species listed in the section. Apply before or after bulbs emerge	
Wildflower	but before bulbs bloom and weeds emerge.	
Plantings	2. In wildflowers, a postemergence herbicide labeled for	
	wildflowers may be needed to control weeds that have already	
	emerged.	

How Much Prodiacade and When to Apply - Ornamentals

Amount to Apply (Broadcast)*	When to Apply	Comments/Instructions
21-48 ozs./A or	In fall or spring before weeds	1. Use the higher rate for longer control. 2. Prodiacade may be applied more than
0.5-1.1 ozs./1,000 sq. ft.	germinate or after weeds are removed.	once per year as long as the total amount of product applied does not exceed 48 ozs./A per year.

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

#### Band width in inches

Row width in inches X broadcast rate = amount to apply/acre of field

**Equivalent Measurements for Prodiacade** 

ozs/A	ozs./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 Ornamentals

Prodiacade 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 Prodiacade are broader spectrum of weed control or to control emerged weeds. Tank mixes with Prodiacade 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 Prodiacade on Ornamentals

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

The species listed below in Table 1 are tolerant to Prodiacade. Prodiacade may be used for application, except in CA, to the species in Table 2. Prodiacade may be applied over the top of the listed species. The species that are not tolerant to Prodiacade when grown in containers are indicated.

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

#### Table 1. Tolerant Ornamental Species – All States

Scientific Name

Common name

Abies spp.

Fir species \*\* (Balsam, Fraser, Noble, etc.)

Acer palmatum
Acer platanoides

Japanese Maple Norway Maple

Actinida chinensis

Kiwi\*

Agapanthus africanus

Lily-of-the-Nile (African Lily)

Arctostaphylos densiflora Arctotheca calendula Vine Hill Manzanita

Aucuba japonica

Cape Weed
Japanese Aucuba

Berberis gladwynensis

Barberry

Berberis julianae Berberis mentorensis Wintergreen Barberry Mentor Barberry Japanese Barberry

Berberis thunbergii Berberis verruculosa Buxus microphylla

Warty Barberry
Japanese Boxwood
Weeping Bottlebrush

Callistemon viminalis Calluna vulgaris

Scotch Heather

Carpobrotus edulis

Hottentot Fig (Ice Plant)

Cassia artemisioides Ceanothus rigidus Chamaecyparis pisifera Feathery Cassia Wild Lilac

Cleyera japonica

False Cypress

Citrus spp.

Cleyera
Citrus species\*

Cornus florida
Cornus stolonifera

Flowering Dogwood
American Dogwood

Cortaderia selloana

Pampas Grass

Cotoneaster apiculatus Cotoneaster buxifolius Cranberry Cotoneaster
Cotoneaster

Cotoneaster dammeri

Bearberry Cotoneaster Rockspray Cotoneaster

Cotoneaster microphyllus Crataegus spp.

Hawthorne

Cupressus sempervirens

Italian Cypress

Delosperma alba

White Trailing Ice Plant

Dodonea viscosa Elaeagnus pungens Euonymus fortunei

Hop Bush
Silverberry
Wintercreeper

Euonymus japonica

Japanese Spindle Tree (Evergreen Euonymus) Spreading Euonymus

Euonymus kiautschovicka Fatsia japonica Forsythia intermedia Forsythia viridissima

Japanese Aralia Border Forsythia Greenstem Forsythia

Gardenia jasminoides Gladiolus spp. Gardenia, Cape-Jasmine Gladiolus species\*\*\*

Hedera helix

Hibiscus Hibiscus Rosa-sinensis

Ilex cornuta Ilex crenata Ilex opaca

*Ilex pernyi* 

Ilex vomitoria Iris spp.

Jasminium nudiflorum Juniperus chinensis Juniperus conferta Juniperus horizontalis

Juglans spp.

Walnut\* Justicia brandegeana Shrimp plant Lagerstromia indica Crape Myrtle Ligustrum amurense Amur Privet Ligustrum japonicum Japanese Privet

Ligustrum lucidum Glossy Privet (Wax-Leaf)

English Ivy Rose of Sharon\*\*

Chinese Hibiscus\*\*

Chinese Holly\*\*

Japanese Holly

American Holly

Yaupon Holly

Iris species\*\*

Shore Juniper

Creeping Juniper

Winter Jasmine Chinese Juniper

Holly

Big Blue Lillyturf Liriope muscari Lonicera japonica Japanese Honeysuckle Lonicera tatarica Tatarian Honeysuckle Magnolia species\*\* Magnolia spp.

Maleophora luteola Ice Plant Malus spp. Crabapple\*

Nandina domestica Heavenly Bamboo Narcissus spp. Narcissus species\*\*

Nerium spp. Oleander Olea europaea Olive\*

Ophiopogon japonicus Mondo Grass\*\*

Osteospermum fruiticosum Trailing African Daisy

Oxydendrum arboreum Sourwood Persea americana Avocado\*

Photinia fraseri Frasier's Photinia (Redtip)

Picea spp. Spruce species\*\*(Colorado Blue, Norway, etc.)

Pieris japonica Lily-of-the-Valley Shrub

Pinus brutia Calabrian Pine Pinus canariensis Canary Island Pine

Pinus elliottii Slash Pine Pinus halepensis Aleppo Pine

Pinus nigra Austrian Black Pine Pinus palustrus Longleaf Pine Pinus radiata Monterey Pine Eastern White Pine Pinus strobus

Pinus sylvestris Scotch Pine Pinus taeda Loblolly Pine

Pinus thunbergiana Japanese Black Pine Pinus virginiana

Virginia Pine Pistachio\*

Pistacia spp.
Pittosporum rhombifolium

Queensland Pittosporum

Pittosporum tobira

Japanese Pittosporum

Podocarpus macrophyllus Prunus laurocerasus Japanese Yew English Laurel

Prunus spp.

Almond, Apricot, Nectarine, Peach, Plum and Prune\*

Pseudotsuga menziesii Pyracantha coccinea Douglas Fir\*\*
Firethorn Scarlet

Pyracantha fortuneana Pyracantha koidzumii Firethorn Firethorn

Pyrus spp.

Bradford Pear spp.

Quercus rubra Raphiolepsis indica Oak species Indian Hawthorn

Rhododendron (Including Azalea) 'Coral Bells'

'Formosa'
'Hino-crimson'

'PJM'

'Roseum Elegans'

Rosa banksiae

Lady Bank's Rose

Rosmarinus officinalis

Rosemary\*

Rumohra adiantiformis

Leatherleaf Fern

Santolina virens

Sedum album

Stonecrop

Syzygium paniculatum

Japanese Boxcherry

Taxus cuspidata

Japanese Yew

Taxus media

Yew

Thuja occidentalis

American Arborvitae

Trachelospermum asiatum Tsuga canadensis Star Jasmine Canada Hemlock

Tulipa spp.

Tulip species

Viburnum japonicum Viburnum odoratissimum

Japanese Viburnum Sweet Viburnum

Viburnum plicatum Viburnum rigidum Japanese Snowball
Canary Island Viburnum

Viburnum tinus Viburnum trilobium

Laurustinus Cranberry Bush

Viburnum wrightii

Leatherleaf Viburnum

Vinca major

Vinca

Vinca minor

Dwarf Periwinkle

Vitis spp. G

Grape\*

Weigela florida

Old Fashioned Weigela

Yucca aloifolia Spanish Bayonet

Yucca filamentosa

Yucca, Adam's Needle

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

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

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

Scientific Name Common Name

Abelia grandiflora Abelia: Sherwood Yarrow: King Edward

Agapanthus orientalis

Akebia quintata Five-leaf or Chocolate Vine
Allium cernuum Lady's Leek, Nodding Onion

Anemone hybrida Japanese Anemone Aquilegia spp. Aquilegia: Red and Gold

Artemisia spp. Wormwood; Silver Mound, Castle Aster spp. Aster: Bonny Blue, Purple Dome

Aster x frikartii

Athyrium filix-femina Lady Fern; Fern Lady

Begonia spp. Fibrous Begonia: Hardy Grandis

Bergenia cordifolia

Boltonia asteroids Snowbank
Bougainvillea spp. Bougainvillea

Buddleia davidii Butterfly-Bush (Dwarf Blue); Royal Red

Callistemon citrinus Crimson Bottlebrush

Campanula carpatica Tussock Bellflower; (White Clips)

Campis x tagliabuana Trumpet Creeper, Trumpet Flower, Madame Galen

Ceratostigma plumbaginoides Chrysanthemum nipponicum

Coreopsis spp. Coreopsis (Calliopsis): Early Sunrise, Moonbeam

Crocosmia spp.

Delosperma spp.

Delphinium spp.

Lucifer

Cooperi Pink

Larkspur; Blue Elf

Dianthus deltoides Dianthus, Maiden Pinks 'Zing'

Dianthus gratianopolitanus Cheddar Pink

Echinacea purpurea Coneflower, Purple; Magnus

Forsythia suspena Weeping Forsythia

Gaillardia spp. Gaillardia, Blanket Flower: 'Goblin'

Gaura spp.

Gentiana dahurica Gentian
Geranium cinereum Cranesbill
Gypsophila repens Baby's Breath
Helianthemum spp. Sunrose

Hemerocallis spp. Daylily: Aztec Gold, Stella De Oro, Tender Love

Heucherella spp.Coral Bell; Bridget BloomHibiscus spp.Mallow; Disco Belle WhiteHosta plantagineaHosta, Plantain Lily (Fragrant)

Hosta sieboldiana Hosta, 'Searsucker'

Houttuynia cordata var. variegata

Hydrangea macrophylla Bigleaf Hydrangea

Inula ensifolia

Iris ensata Sword-Leaved Iris; Jodlesong

Iris siberica Siberian Iris; Cabernet



Juniperus davurica

Parsoni

Lagerstromia indica x fauriei Crape Myrtle; Tuscarora

Lantana montevidensis

Weeping Lantana Lavender: Munstead

Leontopodium alpinum

Edelweiss

Ligustrum sinense

Lavender spp.

Chinese Privet; Variegata

Lilium spp.

Lily: Jazz

Liriope muscari var. variegata Liriope spicata

Liriope, Variegated Liriope, Creeping

Lobelia cardinalis

Cardinal Flower, Indian Pink

Loropetalum chinense

Burgundy

Lythrum spp.

Loosestrife; Modern Pink Yaku Jima\*\*, Silberfeder\*\*

Miscanthus sinensis Oenothera missourensis

Evening Primrose

Osmanthus heterophyllus

Osmanthus (False Holly): Gulf Tide

Paeonia suffruticosa

Tree Peony

Pennisetum setaceum

Fountain Grass (Dwarf)\*\*

Perovskia atriplicifolia

Physostegia virginiana

Dragonhead, False; Vivid Oak, Shumard's Red

Quercus shumardii Raphiolepsis umbellata

Yedda Hawthorne

Rhododendron (including Azalea) 'Delaware Valley White'

'Flame Creeper' 'Girard Crimson' 'George L. Tabor' 'Wakeiebisu' 'White Gumpo'

Redbeckia spp.

Black-Eyed Susan: Goldstrum

Saxifraga spp.

Saxifrage; Purple Dome

Scabiosa spp.

Pincushion Flower

Sedum cauticola

Stonecrop; Lidakense

Sedum dasyphyllum

Stonecrop

Sedum spurium Spiraea bumalda Stonecrop; Dragon's Blood Spirea: Anthony Waterer

Syzygium paniculatum

Australian Brushcherry

Teucrium spp.

Germander

Thalictrum dipterocarpum Veronica spp.

Meadow Rue Veronica, Speedwell; Sunny Border

Viburnum suspensum

Arrowood Viburnum

## NEW PLANTINGS, REPLANTING AND ROTATIONAL PLANTINGS

Nursery, landscape, or non-cropped land areas treated with Prodiacade 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

<sup>\*\*</sup> Not for use on container grown plants.

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 ozs./A per year.

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