

EPA Rea. Number: 34704-

961

AUG 2 9 2006

Term of Issuance:

Conditional

Date of Issuance:

Name of Pesticide Product:

Prodiacade T & O Herbicide

U.S. KNVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505P) Ariel Rice Building 1200 Pennsylvania Ave. NW Washington, D.C. 20460

NOTICE OF PESTICIDE:

X Registration Reregistration

(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.34704-961 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 (7505P)

Signature of Approving Official:

Joanne J. Miller

Date:

AUG 2 9 2006

EPA Form 8570-6

#### Comments Continued:

- 2. On page 5, delete the word: "plantings" from the sites listed under the heading "WHERE TO USE".
- 3. Add an EPA establishment number and appropriate net contents for the container label.
- 4. Submit one (1) copy of the final printed labeling before you release this product for shipment.
- 5. 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.

### Prodiacade T & O Herbicide

Active Ingredient:	
Prodiamine*	65.0%
Other Ingredients:	
Total:	100.0%
*CAS No. 29091-21-2	

# ACCEPTED with COMMENTS In EPA Letter Dated:

AUG 2 9 2006 Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

34704-961

#### For 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 perennials and wildflower plantings
- 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
- Christmas tree farms.

# KEEP OUT OF REACH OF CHILDREN CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA REG. NO. 34704-

EPA EST. NO.

NET CONTENTS: 3 lbs., 5 lbs. (10 ½ lb water soluble packets; 5 lbs. total net contents per container) or 10 lbs.

Formulated For:



P.O. Box 1286 Greeley, CO 80632

# PRECUATIONARY STATEMENTS Hazards to Humans and Domestic Animals CAUTION

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

	FIRST AID
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>
	■ Call a poison control center or doctor for treatment advice.
If on skin or	■ Take off contaminated clothing.
clothing	Rinse skin immediately with plenty of water for 15-20 minutes.
L	<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 by mouth-to-mouth, if possible.
	Call a poison control center or doctor for treatment advice.
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.
	<ul> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> </ul>
	■ Do not give anything by mouth to an unconscious person.

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

FOR A MEDICAL EMERGENCY INVOVLING THIS PRODUCT CALL: 1-800-301-7976.

## Personal Protective Equipment (PPE) WPS USES:

Applicators and other handlers (other than mixers and loaders) who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR Part 170) – in general, agricultural plant uses are covered, must wear: long-sleeved shirt and long pants, chemical-resistant gloves, such as butyl rubber >14 mils, or neoprene rubber >14 mils, or nitrile rubber >14 mils, and shoes plus socks.

Mixers and loaders must wear: Long-sleeved shirt and long pants, chemical-resistant gloves, such as butyl rubber >14 mils, or neoprene rubber >14 mils, or nitrile rubber >14 mils and shoes plus socks.

#### **NON-WPS USES:**

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

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

#### **Engineering Controls Statements**

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

#### **User Safety Recommendations:**

#### Users should:

Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

After handling this product, immediately wash the outside of gloves before removing them, then remove gloves and all other PPE. Immediately wash thoroughly and change into clean clothing.

#### **Environmental Hazards**

This product has low solubility in water. At the limit of solubility, this product is not toxic to fish. However, at concentrations substantially above the level of water solubility, it may be toxic to fish. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Do not contaminate water when disposing of equipment wash water.

#### DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment

(PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: coveralls, chemical-resistant gloves, such as butyl rubber >14 mils, or neoprene rubber >14 mils, or nitrile rubber >14 mils and shoes plus socks.

#### Water Soluble Packets

This box contains Prodiacade T & O Herbicide in 0.5 lb. water soluble packets. These packets are designed to be dropped, unopened, into the spray tank.

Do not remove water soluble packets from container except for immediate use. Reseal the outer container after use.

#### STORAGE AND DISPOSAL

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

Pesticide Storage: Store in original container away from fertilizer, feed, or food stuffs. Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

#### Container Disposal

Paper bags and boxes: Completely empty container into application equipment. Then dispose of empty bag or box in sanitary landfill or incinerate; or, if allowed by state and local authorities, burn locally. Stay out of smoke from burning container.

Plastic jugs: Triple rinse (or equivalent) and dispose of in a sanitary landfill or incinerate, or if allowed by state and local authorities, burn locally. Stay out of smoke from burning containers.

Container Disposal for Water Soluble Packets: Do not reuse outer container. Dispose of empty box in a sanitary landfill or incinerate; or if allowed by state and local authorities, burn locally; Stay out of smoke from burning container.

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 cleanup procedures and disposal of wastes.

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

### GENERAL INFORMATION WHERE TO USE

Prodiacade T & O Herbicide is a preemergence herbicide that provides residual control of many grass and broadleaf weeds in:

Established turf grasses (excluding golf course putting greens), lawns and sod nurseries; Container, field-grown and landscape ornamentals; Conifer and hardwood seedling nurseries; Established perennials and wildflower plantings; Non-crop areas, including plantings, 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; and Christmas tree farms.

#### **HOW PRODIACADE T & O WORKS**

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

#### **USE PRECAUTIONS**

Do not graze or feed livestock forage cut from areas treated with Prodiacade T & O. Do not apply Prodiacade T & O to plants that will be consumed for food use. Follow all applicable directions, restrictions, and precautions on the labels of EPA registered tank mix partners.

Do not blend Prodiacade T & O onto dry fertilizer or any other granular material. **Chemigation:** Do not apply this product through any type of irrigation system unless instructed otherwise in this label.

Do not apply aerially.

Do not apply to golf course putting greens.

#### NEW PLANTINGS, REPLANTING AND ROTATIONAL PLANTINGS

Nursery, landscape, or non-crop land areas treated with Prodiacade T & O 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 or 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 replantings of labeled species, it may be necessary to retreat exposed soil to maintain satisfactory weed control.

#### MIXING AND APPLICATION PROCEDURES

MIXING (For loose pack)

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

- 1. Fill the spray tank 1/4 full with clean water or fluid fertilizer only.
- 2. Start agitation and check to ensure it is working properly.
- 3. Add Prodiacade T & O directly into the tank.
- 4. Add the rest of the carrier to obtain the final spray volume.
- 5. A spray colorant may be used with Prodiacade T & O to mark areas as they are treated. This will improve application accuracy by minimizing swath skips and overlaps.
- 6. Maintain vigorous agitation in the spray tank before and during the application. This will ensure a well-mixed spray suspension.

7. Do not allow spray suspension to dry in the tank. Thoroughly clean the sprayer after use by flushing the system with water containing a detergent. Refer to **Pesticide Disposal** section of this label for waste disposal.

#### MIXING (For water soluble packets)

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

- 1. Settling of product can occur during shipment. Wearing chemical-resistant gloves, "fluff' product like a pillow to improve distribution of product and help speed dissolving process.
- 2. Fill the spray tank ¼ full with clean water only.
- 3. Start agitation and check to insure it is working properly.
- 4. Add water soluble packets of Prodiacade T & O and any other tank mix partners that are packaged in water soluble bags directly into the tank.
- 5. Allow packets to dissolve completely before adding any fertilizer additives and the rest of the water to obtain the final spray volume.
- 6. If liquid fertilizer is the primary carrier, dissolve Prodiacade T & O packets in a separate mixing vat at a minimum of one quart clean water to each pound of Prodiacade T & O. Dissolve packets completely in vat before adding to spray tank.
- 7. Maintain vigorous agitation in the spray tank before and during the application. This will ensure a well-mixed spray suspension.
- 8. A spray colorant may be used with Prodiacade T & O to mark areas as they are treated. This will improve application accuracy by minimizing swath skips and overlaps.
- 9. Thoroughly clean the sprayer after use by flushing the system with water containing a detergent.
- 10. Refer to **Pesticide Disposal** section of this label for waste disposal. Do not allow spray suspension to dry in the tank.

#### TANK MIXING PRODIACADE T & O

Prodiacade T & O may be tank mixed with certain other EPA-registered herbicides to provide a broader spectrum of weed control or to control emerged weeds. Refer to the specific directions for use for tank mix partners, and consult the label(s) of the individual tank mix partner(s) for use rate, application timing, weeds controlled, and specific precautions and/or restrictions. Tank mixes are permitted only in states where the tank mix partner(s) are registered for the application site and the turf and ornamental species listed. When using Prodiacade T & O in a tank mixture with other pesticides, observe the most restrictive label limitations and precautions on the labels of the products used. Before tank mixing with other pesticides not named on this label, compatibility must be tested. See the Compatibility Test section below.

#### **COMPATIBILITY TEST**

Before mixing Prodiacade T & O with other pesticides in the spray tank, test the compatibility by mixing all components (carrier and pesticide products) in a small container in proportionate quantities. For example, a 1-quart jar would be 1/100 the

volume of a 25 gal./A spray rate. At 1 lb./A the Prodiacade T & O rate would be proportional to 4.5 g per quart. Add approximately 1.5 teaspoons to a quart of water. Calculate amounts for other products based on rate per acre. An approximate volume would be 1.5 teaspoons for each pound per acre of a dry formulation and 0.5 teaspoons for each pint per acre of a liquid formulation. (See following table).

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

Component	Rate Per		
Formulations	Acre	1,000 Sq. Ft.	Level Teaspoons
Prodiacade T & O	1.0 lb.	0.4 oz.	1 ½
Dry Tank Mix	1.0 lb.	0.4 oz.	1 1/2
Partners			
Liquid Tank Mix	1.0 pt.	0.4 oz.	1/2
Partners	•		

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

#### MIXING ORDER FOR TANK MIXTURES

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

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

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

#### APPLICATION

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

#### SPECIFIC USE DIRECTIONS

#### **ESTABLISHED TURF**

Prodiacade T & O is a preemergence herbicide that, when properly applied, will control certain grass and broadleaf weeds listed on this label in established turfgrasses including:

- o Lawns
- Sod nurseries
- o Golf courses excluding putting greens.

The maximum amount of Prodiacade T & O that may be applied per year is given for each turfgrass species in the **Annual Use Rates** – **Turfgrass** section of this label. For optimum weed control, Prodiacade T & O 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



#### Use Precautions - Turfgrass

- 1. Do not apply Prodiacade T & O to areas where dichondra, colonial bentgrass, velvet bentgrass or annual bluegrass (*Poa annua*) are desirable species.
- 2. Do not harvest treated sod within 90 days of 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 T & O 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 T & O to golf course putting greens.
- 6. If the depth of the creeping bentgrass root system becomes shallow and root tips contact Prodiacade T & O treated soil, new root formation may be inhibited.

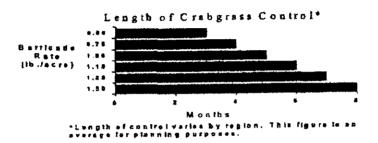
  Mowing height can affect the depth of a plant's root system. To avoid this, do not apply Prodiacade T & O to creeping bentgrass less than 0.5 inch in height.

#### Application Timing and Rate - Turfgrass

Prodiacade T & O may be applied as a single application or in sequential applications to control weeds germinating throughout the year. All applications should be made before target weeds germinate. Prodiacade T & O will not control weeds that have already emerged.

The amount of Prodiacade T & O to apply is based upon: 1) the length of weed control desired (the higher the application rate, the longer the control; see Figure 1. 2) the turf species, and 3) the amount which is applied to the turf species per calendar year (see Table 1).

Figure 1: Length of Crabgrass Control



#### Annual Use Rates - Turfgrass

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

Table 1. Maximum Application Rate of Prodiacade T & O per Calendar Year for

Turfgrass Species<sup>1</sup>

Turf Species	lbs. product/A	oz. product/1,000 sq. ft.	Area treated per water soluble packet (sq. ft.)
Bermudagrass <sup>2</sup>	$1.0 - 2.3^{1}$	0.36 - 0.83	22,000 – 9,600
Bahiagrass			Ì
Centipedegrass			
Kikuyugrass			
Seashore Paspalum			
St. Augustinegrass <sup>3</sup>	{		į
Tall Fescue (including			
turf-type)			
Zoysiagrass			
Buffalograss	$0.5 - 1.50^{1}$	0.185 - 0.55	44,000 - 14,700
Kentucky Bluegrass	:		
Perennial Ryegrass			
Fine Fescue	$0.5 - 1.15^1$	0.185 - 0.42	44,000 – 19,100
Creeping Bentgrass (0.5	$0.5 - 1.00^{1}$	0.185 - 0.37	44,000 – 22,000
inches or more in height)4			

- Prodiacade T & O may be applied more than once a year as long as the total amount applied is not greater than the maximum application rate per calendar year for the turf species. All applications must be made before weed seeds germinate.
- May be used only on newly-sprigged or plugged Bermudagrass at rates not to exceed 0.80 lb./A (0.30 oz./1,000 sq. ft.). Newly-sprigged or plugged Bermudagrass stolon rooting may be temporarily retarded.

Use an initial rate of 0.75 - 1.5 lbs./A (0.28 - 0.55 oz./1000 sq. ft.) per application.

To avoid grass injury, do not apply Prodiacade T & O to creeping bentgrass mowed at less than 0.5 inch in height.

#### Weeds Controlled (Turf, Ornamentals)

When used as directed in this label Prodiacade T & O will control the following weeds:

Barnyardgrass Kochia

Bluegrass, Annual (*Poa annua*)<sup>1</sup> Lambsquarter, Common

Carpetweed Lovegrass

Chickweed, Common<sup>2</sup> Panicum, (Texas, Fall, Browntop)

Chickweed, Mouseear (from seed) Pigweed

Crabgrass (Large, Smooth)<sup>5</sup> Purslane, Common Crowfootgrass Pusley, Florida Cupgrass, Woolly Rescuegrass<sup>4</sup> Foxtails, Annual Shepherd's Purse<sup>2</sup> Goosegrass<sup>5</sup> Signalgrass, Broadleaf Henbit<sup>2</sup> Speedwell, Persian Itchgrass Sprangletop Johnsongrass (from seed) Spurge, Prostate

Junglerice Witchgrass
Knotweed<sup>2</sup> Woodsorrel, Yellow (from seed)

In areas where *Poa annua* is a winter annual, apply Prodiacade T & O (see Table 1) 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.

To control this weed, apply Prodiacade T & O in late summer, fall, or winter before weed seeds germinate.

Fall Applications for Spring Crabgrass Control in Cool-Season Grasses: In those areas where the ground freezes in the winter, Prodiacade T & O can be applied in the fall at rates of 1.0 - 1.15 lbs./A after the soil temperature falls below 50°F but before the ground freezes. This application will control crabgrass the following spring.

Suppression only.

In many areas a single application of 1.0 – 2.3 lbs./A Prodiacade T & O will control goosegrass. However, under heavy goosegrass pressure and/or an

extended growing season, the most effective control may be maintained by making a "split application" (i.e., two applications) that does not exceed the maximum application rate per calendar year for the turfgrass species.

#### When to Apply Prodiacade T & O After Overseeding Turf

Injury to desirable seedlings is likely if Prodiacade T & O 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 T & O.

When to Overseed After Application – All States\* Prodiacade T & O 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 Prodiacade T & O	Interval (Months) Before Overseeding*		
lbs. Product/A	North	Transition	South
0.75	4	4	4
1.00	5	4	4
1.15	6	5	5
1.25		6	6
1.50	<b>*</b>	7	7
1.75			9
2.00			10
2.30			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 lbs./A).

How Much and When to Apply

Amount to Apply	When to Apply	<b>Expected Control</b>	Use Precautions
0.58 – 1.0 lb./A	6 – 8 weeks before ryegrass overseeding Second application: 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	<ul> <li>Some seedling mortality and temporary reduction in root growth of new seedlings may occur.</li> <li>To reduce the potential for seedling mortality, maintain a moist seedbed with light, frequent irrigation.</li> <li>Make no more than two applications per year for this use, and do not exceed a total of 1.3 lbs./A per year.</li> <li>Do not make a second application if any injury to the ryegrass is observed after the first application.</li> <li>Do not make a second application unless the product was first applied before overseeding.</li> </ul>

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

Use this product on golf courses (excluding golf course putting greens) when overseeding with perennial ryegrass only (minimum seeding rate of 350 lbs./A).

How Much and When to Apply

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Amount to	When to	Expected	Use Precautions
Apply	Apply	Control	
0.58 – 1.0 lb./A	8 – 10 weeks before ryegrass overseeding	70% or greater	<ul> <li>Some seedling mortality and temporary reduction in root growth of new seedlings may occur.</li> <li>To reduce the potential for seedling mortality maintain a moist seedbed with light, frequent irrigation.</li> <li>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.</li> </ul>

## CONTAINER, FIELD GROWN, LANDSCAPE ORNAMENTALS (INCLUDING CHRISTMAS TREE FARMS)

Application Timing and Information

Prodiacade T & O:

- 1. Will not control emerged weeds.
- 2. May be applied to newly-transplanted and established ornamentals as broadcast or over-the-top spray.
- 3. Is the 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 (1-2) inches mechanical incorporation.

#### **Use Precautions:**

To reduce injury potential:

- 1. In the spring when buds are rapidly growing and expanding, over-the-top application of Prodiacade T & O may temporarily injure new growth of desirable plants. To reduce the possibility of injury at this time, wait to apply Prodiacade T & O 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 Prodiacade T & O from plant surfaces onto soil (watering plants before application may improve the washing process).

**Application Sites and Instructions** 

Site	Application Instructions
Newly-transplanted Container or Field Nursery Stock	<ul> <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> </ul>
Established Container, Field Nursery Stock, or Landscape Plants	<ul> <li>Apply at any time as a broadcast, over-the-top, or directed spray.</li> </ul>
Landscape (or Ornamental) Plantings	<ul> <li>Apply as a broadcast, over-the-top, or as a directed spray.</li> <li>Delay application to newly-transplanted ornamentals until soil has settled around transplants.</li> </ul>
Bare Ground Application for Container Placement	<ul> <li>Apply to soil (including mulch, gravel, wood chips, or other permeable base) upon which containerized ornamentals are placed.</li> <li>After Prodiacade T &amp; O is applied, perform shallow cultivation or hand weeding only, to avoid disturbing the herbicide barrier.</li> </ul>
In Shadehouses and Uncovered Polyhouses	<ul> <li>After Prodiacade T &amp; O is applied, uncovered polyhouses must remain open for at least 7 days and ornamentals must receive two irrigations totaling at least ½ inch of water.</li> </ul>
Ornamental Bulbs and Perennial Wildflower Plantings	<ul> <li>Prodiacade T &amp; O may be applied to bulbs or perennial wildflower species listed in the section, Tolerant Ornamental Species.</li> <li>Apply before or after bulbs emerge but before bulbs bloom and weeds emerge. In wildflowers, a postemergence herbicide labeled for wildflowers may be needed to control weeds that have already emerged.</li> </ul>

How Much and When to Apply (Container, Field Grown and Landscape Ornamentals)

Amount to Apply (Broadcast)*	When to Apply	Comments/Instructions
1.0 – 2.3 lbs./A Or 0.37 – 0.83 oz./1,000 sq. ft.	In fall or spring before weed germinate or after weeds are removed	<ul> <li>Use the higher rate for longer control.</li> <li>Prodiacade T &amp; O may be applied more than once per year as long as the total amount of product applied does not exceed 2.3 lbs./A per year.</li> </ul>

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

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

Row width in inches

Equivalent Measurements for Prodiacade T & O

lbs./A	oz./1,000 sq. ft.	Approximate Equivalent – tbsp./1000 sq. ft.
1.0	0.37	1
1.5	0.55	1 1/2
2.0	0.74	2
2.3	0.83	2 1/4

Tank Mixtures For Use on Container, Field-Grown, and Landscape Ornamentals Prodiacade T & O 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 T & O 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, ad specific use precautions and/or restrictions. Before mixing pesticides in the spray tank, test compatibility by mixing the products in a small container first. See the **Compatibility Test** section of this label.

Tank Mix Partners for Prodiacade T & O on Ornamentals

Tank Wisk Tartners for Froductade 1 & O on Ornamentals		
Product	Precautions/Instructions	
Goal® (use on conifers only)	<ul> <li>Mix with Prodiacade T &amp; O for postemergence control of certain broadleaf weeds including malva and filaree.</li> </ul>	
Gallery®, Princep®, Pennant®	<ul> <li>See product labels for weed spectrum and tolerant ornamentals.</li> </ul>	
Touchdown® Pro (or other glyphosate based products), Reward® and Finale®	<ul> <li>These non-selective tank mix herbicides control most emerged annual broadleaves and grasses.</li> <li>Take extreme care to prevent tank mixtures with these 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 or desirable plants.</li> <li>Following instructions on the tank mix partner's label, delay irritation of the treated area to allow time for the herbicide to be absorbed by weed foliage.</li> </ul>	

### Tolerant Ornamental Species – Container, Field Grown, and Landscape Ornamentals

Prodiacade T & O will not harm most trees, shrubs, vines, and flowers. The species listed below in Table 2 are tolerant to Prodiacade T & O. Prodiacade T & O is approved for application, except in California, to the species in Table 3. Prodiacade T & O 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 Prodiacade T & O.

Table 2: Tolerant Ornamental Species – Container, Field Grown, and Landscape – All States

Scientific name	Common name
Abies spp.	Fir species** (Balsam, Fraser, Noble, etc.)
Acer palmatum	Japanese Maple
Acer platanoides	Norway Maple***
Actinidia chinensis	Kiwi*
Agapanthus africanus	Lily-of-the-Nile (African Lily)
Arctostaphylos densiflora	Vine Hill Manzanita
Arctotheca calendula	Cape Weed
Aucuba japonica	Japanese Aucuba
Berberis gladwynensis	Barberry
Berberis julianae	Wintergreen Barberry
Berberis mentorensis	Mentor Barberry
Berberis verru ulosa	Warty Barberry
Berberis thunbergii	Japanese Barberry
Buxus microphylla	Japanese Boxwood
Callistemon viminalis	Weeping Bottlebrush
Calluna vulgaris	Scotch Heather
Carpobrotus edulis	Hottentot Fig (Ice Plant)
Cassia artemisioides	Feathery Cassia
Ceanothus rigidus	Wild Lilac
Chamaecyparis pisifera	False Cypress
Cleyera japonica	Cleyera
Citrus spp.	Citrus species*
Cornus florida	Flowering Dogwood
Cornus stolonifera	American Dogwood
Cortaderia selloana	Pampas Grass
Cotoneaster apiculatus	Cranberry Cotoneaster
Cotoneaster buxifolius	Cotoneaster
Cotoneaster dammeri	Bearberry Cotoneaster
Cotoneaster microphyllus	Rockspray Cotoneaster
Crataegus spp.	Hawthorne
Cupressus sempervirens	Italian Cypress
Delosperma alba	White Trailing Ice Plant

Dodonaea viscosa	Hop Bush
Elaeagnus pungens	Silverberry
Euonymus fortunei	Wintercreeper
Euonymus japonica	Japanese Spindle Tree (Evergreen Euonymus)
Euonymus kiautschovicks	Spreading Euonymus
Fatsia japonica	Japanese Aralia
Forsythia intermedia	Border Forsythia
Forsythia viridissima	Greenstem Forsythia
Gardenia jasminoides	Gardenia, Cape-Jasmine
Gladiolus spp.	Gladiolus species**
Hedera helix	English Ivy
Hibiscus	Rose of Sharon**
Hibiscus Rosa-sinensis	Chinese Hibiscus**
Ilex cornuta	Chinese Holly**
Ilex crenata	Japanese Holly
Ilex opaca	American Holly
Ilex pernyi	Holly
Ilex vomitoria	Yaupon Holly
Iris spp.	Iris species**
Jasminium nudiflorum	Winter Jasmine
Juniperus chinensis	Chinese Juniper
Juniperus conferta	Shore Juniper
Juniperus horizontalis	Creeping Juniper
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)
Lirope muscari	Big Blue Lillyturf
Lonicera japonica	Japanese Honeysuckle
Lonicera tatarica	Tatarian Honeysuckle
Magnolia spp.	Magnolia species**
Malephora 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 fruticosum	Trailing African Daisy
Oxydendrum arboretum	Sourwood
Persea Americana	Avocado*
Photinia fraseri	Frasier's Photinia (Redtip)
Picea spp.	Spruce species***(Colorado Blue, Norway, etc.)

Piavia ianovina	Lily of the Walley Chryb	
Pieris japonica Pinus brutia	Lily-of-the-Valley Shrub  Calabrian Pine	
Pinus canariensis		
Pinus canariensis Pinus elliottii	Canary Island Pine	
	Slash Pine	
Pinus halepensis	Aleppo Pine	
Pinus nigra	Austrian Black Pine	
Pinus palustris	Longleaf Pine	
Pinus radiata	Monterey Pine	
Pinus strobus	Eastern White Pine	
Pinus sylvestris	Scotch Pine	
Pinus taeda	Loblolly Pine	
Pinus thunbergiana	Japanese Black Pine	
Pinus virginiana	Virginia Pine	
Pistacia spp.	Pistachio*	
Pittosporum rhombifolium	Queensland Pittosporum	
Pittosporum tobira	Japanese Pittosporum	
Podocarpus macrophyllus	Japanese Yew	
Prunus laurocerasus	English Laurel	
Prunus spp.	Almond, Apricot, Nectarine, Peach, Plum and Prune*	
Pseudotsuga menziesii	Douglas Fir**	
Pyracantha coccinea	Firethorn Scarlet	
Pyracantha foruneana	Firethorn	
Pyracantha koidzumii	Firethorn	
Pyrus spp.	Bradford Pear spp.	
Quercus rubra	Oak species	
Rhaphiolepis indica	Indian Hawthorn	
Rhododendron (including	'Coral Bells', 'Formosa', 'Hino-crimson', 'PJM',	
Azalea)	'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 cuspidate	Japanese Yew	
Taxus media	Yew	
Thuja occidentalis	American Arborvitae	
Trachelospermum asiaticum	Star Jasmine	
Tsuga canadensis	Canada Hemlock	
Tulipa spp.	Tulip species	
Viburnum japonicum	Japanese Viburnum	
Viburnum plicatum	Japanese snowball	
Viburnum odoratissimum	Sweet Viburnum	
Viburnum rigidum	Canary Island Viburnum	
Viburnum tinus	Laurustinus	
r IOMETIME MITUO	TOWN WE WANTED	

Viburnum trilobum	Cranberry Bush
Viburnum wrightii	Leatherleaf Viburnum
Vinca major	Vinca
Vinca minor	Dwarf Periwinkle
Vitis spp.	Grape*
Weigela florida	Old Fashioned Weigela
Yucca aloifolia	Spanish Bayonet
Yucca filamentosa	Yucca, Adam's Needle

<sup>\*</sup> Do not use on food producing trees, vines, or plants.

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

\*\*\*Landscape ornamentals only.

Table 3. Tolerant Ornamental Species – Container, Field Grown and Landscape – All States Except CA

Scientific Name	Common Name
Abelia grandiflora	Abelia: Sherwood
Achillea spp.	Yarrow: King Edward
Agapanthus orientalis	
Akebia quinata	Five-Leaf or Chocolate Vine
Allium cemuum	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.	Lucifer
Delosperma spp.	Cooperi Pink
Delphinium spp.	Larkspur; Blue Elf
Dianthus deltoids	Dianthus, Maiden Pinks 'Zing'
Dianthus gratianopolitanus	Cheddar Pink
Echinacea pupurea	Coneflower, Purple; Magnus
Forsythia suspensa	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, Stell De Oro, Tender Love
Heucherella spp.	Coral Bell; Bridget Bloom
Hibiscus spp.	Mallow; Disco Belle White
Hosta plantaginea	Hosta, 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 spp.	Lavender; Munstead
Leontopodium alpinum	Edelweiss
Ligustrum sinense	Chinese Privet; Variegata
Lillum spp.	Lily; Jazz
Lirope muscari var. variegata	Lirope, Variegated
Lirope spicata	Lirope, Creeping
Lobelia cardinalis	Cardinal Flower, Indian Pink
Loropetalum chinense	Burgundy
Lythrum spp.	Loosestrife; Modern Pink
Miscanthus sinensis	Yaku Jima**, Silberfeder**
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
Quercus shumardii	Oak, Shumard's Red
Rhaphiolepis umbellata	Yedda Hawthorne
Rhododendron (including azalea)	'Delaware Valley White', 'Flame Creeper', 'Girard
(	Crimson', 'George L. Tabor', Wakeiebisu, White
	Gumpo
Rudbeckia spp.	Black-Eyed Susan: Goldstrum
Saxifraga spp.	Saxifrage; Purple Dome
Scabiosa spp.	Pincushion Flower
Sedum cauticola	Stonecrop; Lidakense
Sedum dasyphyllum	Stonecrop
Sedum spurium	Stonecrop: Dragon's Blood
Down Drai will	1 010110110p. 2145011 0 21004

Spiraea bumalda	Spirea: Anthony Waterer	
Syzglum paniculatum	Australian Brushcherry	
Teucrium spp.	Germander	
Thalictrum dipterocarpum	Meadow Rue	
Veronica spp.	Veronica, Speedwell; Sunny Border	
Viburnum suspensum	Arrowood Viburnum	

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

#### **VEGETATION MANAGEMENT**

Prodiacade T & O 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:
  - o Managed rights-of-way for transportation systems and utilities, including roadways, roadsides, railways, and equipment yards.
  - o 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, Prodiacade T & O will control the following weeds:

Barnyardgrass Kochia

Bluegrass, Annual (*Poa annua*) Lambsquarter, Common

Carpetweed Lovegrass

Chickweed, Common<sup>1</sup> Panicum (Texas, Fall, Browntop)

Chickweed, Mouseear (from seed) Pigweed

Crabgrass (Large, Smooth)<sup>3</sup>
Purslane, Common
Crowfootgrass
Pusley, Florida
Cupgrass, Woolly
Rescuegrass<sup>2</sup>
Foxtails, Annual
Goosegrass<sup>3</sup>
Signalgrass, Broadleaf
Henbit<sup>1</sup>
Speedwell, Persian
Itchgrass
Sprangletop

ItchgrassSprangletopJohnsongrass (from seed)Spurge, ProstrateJunglericeWitchgrass

Knotweed<sup>1</sup> Woodsorrel, Yellow (from seed)

To control this weed, apply Prodiacade T & O in late summer, fall, or winter before weed seeds germinate.

Suppression only.

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

### Application Timing and Information - Vegetation Management

Prodiacade T & O:

- 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 the 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 clods, weeds, and debris such as leaves and mulch.

#### Use Precautions - Vegetation Management

To reduce injury potential:

- Direct application of Prodiacade T & O 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 T & O may temporarily injure
  new growth of desirable plants. To reduce the possibility of injury at this time,
  wait to apply Prodiacade T & O 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 the application (immediately for deciduous plants), irrigate the treated area to wash Prodiacade T & O 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
1.0 – 2.3 lbs./A Or 0.37 – 0.83 oz./1,000 sq. ft.	In fall and/or spring before weeds germinate or after weeds are removed.	<ul> <li>Use the higher rate for longer control.</li> <li>Prodiacade T &amp; O may be applied more than once per year as long as the total amount of product applied does not exceed 2.3 lbs./A per year.</li> </ul>

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

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

Row width in inches

Equivalent Measurements for Prodiacade T & O

lbs./A	oz./1,000 sq. ft.	Approximate Equivalent Tbsp./1,000 sq. ft.
1.0	0.37	1
1.5	0.55	1 1/2
2.0	0.74	2
2.3	0.83	2 1/4

Application Sites and Use Precautions - Vegetation Management

Site	Use Precautions
Ornamental Trees, Shrubs, Vines	<ul> <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> <li>May be applied to bulbs or perennial wildflower species listed in the section Tolerant Ornamental Species.</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

Prodiacade T & O 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 T & O 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 Prodiacade T & O - Vegetation Management

Product	Precautions/Instructions
Goal® (use on conifers only)	<ul> <li>Mix with Prodiacade T &amp; O for postemergence control of certain broadleaf weeds-including malva and filaree.</li> </ul>
Gallery®, Princep®, Pennant®	<ul> <li>See product labels for weed spectrum and tolerant ornamentals.</li> </ul>
Touchdown® Pro (or other glyphosate-based products) Reward® and Finale®	<ul> <li>These non-selective tank mix herbicides control most emerged annual broadleaves and grasses.</li> <li>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.</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

Prodiacade T & O will not harm most trees, shrubs, vine, and flowers. The species listed below in Table 4 are tolerant to Prodiacade T & O. Prodiacade T & O is approved for application, except in California, to the species in Table 5. Prodiacade T & O may be applied over-the-top of the listed species.

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

Table 4: Tolerant Ornamental Species\* - Vegetation Management - All States

Scientific Name	Common Name
Abies spp.	Fir species (Balsam, Fraser, Noble, etc.)
Acer palmatum	Japanese Maple
Acer platanoides	Norway Maple***
Actinidia chinensis	Kiwi**
Agapanthus africanus	Lily-of-the-Nile (African Lily)
Arctostapylos densiflora	Vine Hill Manzanita
Arctotheca calendula	Cape Weed
Aucuba japonica	Japanese Aucuba
Berberis gladwynensis	Barberry
Berberis julianae	Wintergreen Barberry
Berberis thunbergi	Japanese Barberry
Bereberis mentorensis	Mentor Barberry
Berberis verruculosa	Warty Barberry
Buxus microphylla	Japanese Boxwood
Callistemon viminalis	Weeping Bottlebrush
Calluna vularis	Scotch Heather
Carpobrotus edulis	Hottentot Fig (Ice Plant)
Cassia artemisioides	Feathery Cassia
Ceanothus rigidus	Wild Lilac
Chamaecyparis pisifera	False Cypress
Cleyera japonica	Cleyera
Citrus spp.	Citrus species**
Cornus florida	Flowering Dogwood
Cornus stolonifera	American Dogwood
Cortaderia selloana	Pampas Grass
Cotoneaster apiculatus	Cranberry Cotoneaster
Cotoneaster buxifolius	Cotoneaster
Cotoneaster dammeri	Bearberry Cotoneaster
Cotoneaster microphyllus	Rockspray Cotoneaster
Crataegus spp.	Hawthorne
Cupressus sempervirens	Italian Cypress
Delosperma alba	White Trailing Ice Plant
Dodonaea viscosa	Hop Bush
Elaeagnus pungens	Silverberry
Euonymus fortunei	Wintercreeper
Euonymus japonica	Japanese Spindle Tree (Evergreen Euonymus)
Euonymus kiautschovicks	Spreading Euonymus
Fatsia japonica	Japanese Aralia
Forsythia intermedia	Border Forsythia
Forsythia viridissima	Greenstem forsythia

Gardenia jasminoides	Gardenia, Cape-Jasmine
Gladiolus spp.	Gladiolus species
Hedera helix	English Ivy
Hibiscus	Rose of Sharon
Hibiscus Rosa-sinensis	Chinese Hibiscus
Ilex comuta	Chinese Holly
Ilex crenata	Japanese Holly
Ilex opaca	American Holly
Ilex pemyi	Holly
Ilex vomitoria	Yaupon Holly
Iris spp.	Iris species
Jasminium nudiflorum	Winter Jasmine
Juniperus chinensis	Chinese Juniper
Juniperus conferta	Shore Juniper
Juniperus horizontalis	Creeping Juniper
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)
Lirope muscari	Big Blue Lillyturf
Lonicera japonica	Japanese honeysuckle
Lonicera tatarica	Tatarian Honeysuckle
Magnolia spp.	Magnolia species
Malephora 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 fruticosum	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 palustris	Longleaf Pine
Pinus radiata	Monterey Pine
Pinus strobus	Eastern White Pine
Pinus sylvestris	Scotch Pine
Pinus taeda	Loblolly Pine
Pinus thunbergiana	Japanese Black Pine
Pinus virginiana	Virginia Pine
Pistacia spp.	Pistachio**
Pittosporum rhombifolium	Queensland Pittosporum
	Japanese Pittosporum
Pittosporum tobira	Japanese Fittospoium

Podocarpus macrophyllus	Japanese Yew		
Prunus laurocerasus	English Laurel		
Prunus spp.	Almond, Apricot, Nectarine, Peach, Plum and Prune**		
Pseudotsuga menziesii	Douglas Fir**		
Pyracantha coccinea	Firethorn Scarlet		
Pyracantha fortuneana	Firethorn		
Pyracantha koidzumii	Firethorn		
Pyrus spp.	Bradford Pear spp.		
Quercus rubra	Oak species		
Rhaphiolepis indica	Indian Hawthorne		
Rhododendron (including azalea)	'Coral Bells', 'Formosa', 'Hino-crimson', 'PJM', 'Roseum Elgans'		
Rosa banksiae	Lady Bank's Rose		
Rosemarinus 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 asiaticum	Star Jasmine		
Tsuga canadensis	Canada Hemlock		
Tulipa spp.	Tulip species		
Viburnum japonicum	Japanese Viburnum		
Viburnum odoratissimum	Sweet Viburnum		
Viburnum plicatum	Japanese Snowball		
Viburnum rigidum	Canary Island Viburnum		
Viburnum tinus	Laurustinus		
Viburnum trilobum	Cranberry Bush		
Viburnum wrightii	Leatherleaf Viburnum		
Vinca major	Vinca		
Vinca minor	Dwarf Periwinkle		
Vitis spp.	Grape**		
Weigela florida	Old Fashioned Weigela		
Yucca aloifolia	Spanish Bayonet		
Yucca filamentosa	Yucca, Adam's Needle		

<sup>\*</sup>Not for use on container or field grown ornamentals.

Table 5: Tolerant Ornamental Species\* - (Vegetation Management) All States Except CA

Scientific Name	Common Name		
Abelia grandiflora	Abelia: Sherwood		
Achillea spp.	Yarrow: King Edward		
Agapanthus orientalis			
Akebia quinata	Five-Leaf or Chocolate Vine		
Allium cemuum	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			

<sup>\*\*</sup>Do not use on food producing trees, vines, or plants.

<sup>\*\*\*</sup>Landscape ornamentals only.

Athyrium filix-femina	Lady Fern; Fern Lady	
Begonia spp.	Fibrous Begonia: Hardy Grandis	
Bergenia cordifolia	11010th Degotter 11th and 11th	
Boltonia asteroide	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.	Lucifer	
Delosperma spp.	Cooperi Pink	
Delphinium spp.	Larkspur; Blue Elf	
Dianthus deltoides	Dianthus, Maiden Pinks 'Zing'	
Dianthus gratianopolitanus	Cheddar Pink	
Echinacea pupurea	Coneflower, Purple; Magnus	
Forsythia suspensa	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, Stell De Oro, Tender Love	
Heucherella spp.	Coral Bell; Bridget Bloom	
Hibiscus spp.	Mallow; Disco Belle White	
Hosta plantaginea	Hosta, 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 spp.	Lavender; Munstead	
Leontopodium alpinum	Edelweiss	
Ligustrum sinense	Chinese Privet; Variegata	
Lillum spp.	Lily; Jazz2	
Lirope muscari var. variegata	Lirope, Variegated	
Lirope spicata	Lirope, Creeping	
Lobelia cardinalis	Cardinal Flower, Indian Pink	
Loropetalum chinense	Burgundy	
Lythrum spp.	Loosestrife; Modern Pink	
Miscanthus sinensis	Yaku Jima**, Silberfeder**	
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		
Quercus shumardii	Oak, Shumard's Red		
Rhaphiolepis umbellata	Yedda Hawthorne		
Rhododendron (including azalea)	'Delaware Valley White', 'Flame Creeper', 'Girard Crimson',		
	'George L. Tabor', Wakeiebisu, White Gumpo		
Rudbeckia spp.	Black-Eyed Susan: Goldstrum		
Saxifraga spp.	Saxifrage; Purple Dome		
Scabiosa spp.	Pincushion Flower		
Sedum cauticola	Stonecrop; Lidakense		
Sedum dasyphyllum	Stonecrop		
Sedum spurium	Stonecrop: Dragon's Blood		
Spiraea bumalda	Spirea: Anthony Waterer		
Syzyglum paniculatum	Australian Brushcherry		
Teucrium spp.	Germander		
Thalictrum dipterocarpum	Meadow Rue		
Veronica spp.	Veronica, Speedwell; Sunny Border		
Viburnum suspensum	Arrowood Viburnum		

<sup>\*</sup>Not for use on container or field grown ornamentals.

#### CONIFER AND HARDWOOD SEEDLING NURSERIES (NON-ORNAMENTAL, FORESETRY USE ONLY) - VEGETATION MANAGEMENT Prodiacade T & O:

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

<sup>\*\*</sup> Landscape ornamentals only.

Site	Application Rate		Timing	Comments/	
	lbs./A	oz./1,000 sq. ft.		Instructions	
Conifer and Hardwood Seedling Nurseries	1.0 – 2.3	0.37 – 0.84	Apply in fall or spring before weed seeds germinate or after weeds are removed.	<ul> <li>Use higher rate for longer control.</li> <li>More than one application per year is permitted but do not apply more than 2.3 lbs./A per year.</li> </ul>	
Southern Pine Seedbeds	0.75		Just after seeding and/or a minimum of 3 weeks after most seedlings have shed their seedcoat.	<ul> <li>To assist in the establishment of Southern pine seedbeds, apply this product preemergence just after seeding pines.</li> <li>Application after emergence of pine seedlings should not occur until 3 weeks after most seedlings have shed their seedcoat.</li> <li>Mix this product with clean water and broadcast spray at 20 to 40 psi in a minimum of 20 gals. of water per treated area.</li> <li>After application, sprinkler irrigate beds with approximately ½ inch of water.</li> </ul>	
Hardwood Seedbeds; Oak (Quercus spp.), Sweetgum, Green Ash	0.75 – 1.5	,	When seedlings are at least 6 weeks old (from time of 50% germination)	<ul> <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 ½ inch of sprinkler irrigation afterwards.</li> </ul>	

#### Tank Mixtures - Conifer Seedling Nurseries - Vegetation Management

Prodiacade T & O 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 T & O 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, weds 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 product in a small container. See the **Compatibility Test** section.

#### Tank Mixing and Application - Vegetation Management

Tank Mix Partner with Prodiacade T & O - Conifer Seedling Nurseries

Product	Precautions/Instructions
Goal® (use on conifers only)	Mix with Prodiacade T & O for postemergence
,	control of certain broadleaf weeds including malva
	and filaree.

#### **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/
	Lbs./A	oz./1,000 sq. ft.		Instructions
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	1.0 – 2.3	0.36 – 0.83	Before weed seeds germinate	<ul> <li>Use higher rate for longer control</li> <li>This product may be applied more than once per year but do not apply more than 2.3 lbs./A per year.</li> </ul>
stations, parking and storage areas, and ungrazed fence				
rows.				

Prodiacade T & O 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 Prodiacade T & O are for use only in states where the tank mix partner(s) are registered for the application site.

Tank-Mix Partners with Prodiacade T & O - Vegetation Management

Products	Comments
Touchdown®Pro (and glyphosate-based	• Follow the label(s) of the tank mix
products <sup>1</sup> ), Gramoxone®, Reward®,	partner(s) for application rates, timing,
Predict®, Princep®, Vanquish®, diuron-	weeds controlled, tolerant ornamentals,
based products <sup>1</sup> , Finale®, Gallery,	and specific use precautions and/or
Garlon®, Goal®, Krovar® I and II Oust®,	restrictions.
Arsenal®, Spike™ and Telar®	■ Do not mix Prodiacade T & O with any
	product whose label prohibits mixing
	with another pesticide.

Products with this chemical as the active ingredient and which are labeled for the same use may be used.

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

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the setter is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. 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 when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL, THIS PRODUCT IS SOLD AS IS TO THE EXTENT ALLOWED BY APPLICABLE LAW. LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

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