

U.S. ENVIRON MENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505P) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460

EPA Reg. Number:	Date of Issuance:

100-1416

OCT - 6 2011

Term of Issuance:

Name of Pesticide Product:

Prodiamine 4SC

NOTICE OF PESTICIDE:

_x_Registration __Reregistration (under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Syngenta Crop Protection, LLC P.O. Box 18300

Greensboro, NC 27419

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. Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data.
- 2. Make the following label changes:
 - a. Revise the EPA Registration Number to read, "EPA Reg. No. 100-1416", and include the Establishment Number."

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

A stamped copy of the label is enclosed for your records.

Signature of Approving Official:

Kathryn V. Montague

Product Manager 23 Herbicide Branch

Registration Division (7505P)

Date:

OCT - 6

EPA Form 8570-6

Booklet (1 gal., 10 gal., 30 gal., 110 gal.)

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Prodiamine® 4SC

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

Active Ingredient:

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

*CAS No. 29091-21-2

Contains 4 pounds Prodiamine per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-

EPA Est.

1 gallon Net Contents 10 gallon Net Contents 30 gallon Net Contents 110 gallon Net Contents

FIRST AID		
If swallowed	Call a poison control center or doctor immediately for treatment advice.	
	Have person sip a glass of water if able to swallow.	
	Do not induce vomiting unless told to do so by a poison control center or doctor.	
	 Do not give anything by mouth to an unconscious person. 	
If in eyes	 Hold eye open and rinse slowly and gently with water for 15-20 minutes. 	
	 Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. 	
	 Call a poison control center or doctor for treatment advice. 	
If inhaled	Move person to fresh air.	
	If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible	
	Call a poison control center or doctor for treatment advice.	
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 product container or label with you when calling a poison control center or		
doctor, or going for treatment.		
HOT LINE NUMBER		
For 24 Hour Medical Emergency Assistance (Human or Animal) or		
Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call		
1-800-888-8372		

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

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 may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

Personal Protective Equipment

WPS Uses:

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

- Long-sleeved shirt and long pants
- Shoes plus socks

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

Engineering Control Statements

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

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- After handling this product immediately remove PPE, wash yourself thoroughly and change into clean clothing.

Environmental Hazards

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

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

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

DIRECTIONS FOR USE

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

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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

- Coveralls
- Chemical-resistant gloves such as butyl rubber >14 mils or natural rubber >14 mils or neoprene rubber >14 mils or nitrile rubber >14 mils
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

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

PRODUCT INFORMATION

WHERE TO USE

Prodiamine 4SC 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 PRODIAMINE 4SC WORKS

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

USE PRECAUTIONS

- 1. Do not graze or feed livestock forage cut from areas treated with Prodiamine 4SC.
- 2. Follow all applicable directions, restrictions, and precautions on the labels of EPA-registered tank-mix partners.
- 3. Do not blend Prodiamine 4SC 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 PRODIAMINE 4SC ALONE

Prodiamine 4SC 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 Prodiamine 4SC was mixed with fertilizer in the spray tank, the fertilizer may aid resuspension of Prodiamine 4SC 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 Prodiamine 4SC 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 PRODIAMINE 4SC

Prodiamine 4SC 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 Prodiamine 4SC 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 Prodiamine 4SC with other pesticides in the spray tank, test for compatibility by mixing all components (carrier and pesticide products) in an appropriate container in proportionate quantities. For example, 1 qt. would be 1/100 the volume of a 25 gals./A spray rate. At 1.0 lb./A, the Prodiamine 4SC 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)

	Ra	ite Per	
Component Formulations	Acre	1,000 sq. ft.	Level Teaspoons
Prodiamine 4SC	21.0 oz.	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 Prodiamine 4SC with other components (carrier and partner pesticide products), allow products to completely dissolve between steps. (2) Maintain agitation throughout mixing and application of the mixture.

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

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

- 4. Add Prodiamine 4SC, other flowable liquids (FL) or suspension concentrates (SC).
- 5. Add emulsifiable concentrates (EC) last.

APPLICATION

Apply Prodiamine 4SC 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

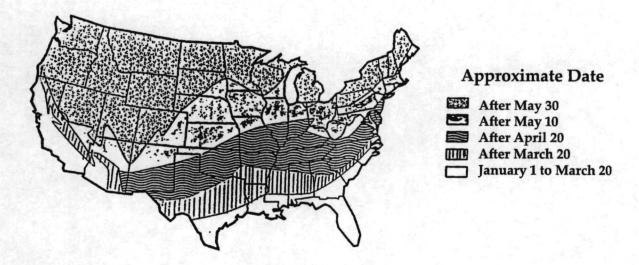
Prodiamine 4SC is a selective preemergence herbicide that, when properly applied, will control certain grass and broadleaf weeds in established turfgrasses including:

- Golf courses excluding putting greens
- Lawns
- Sod nurseries

The maximum amount of Prodiamine 4SC 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, Prodiamine 4SC 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

- Do not apply Prodiamine 4SC to areas where dichondra, colonial bentgrass, velvet bentgrass or annual bluegrass (*Poa annua*) are desirable species.
- 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.
- To avoid turfgrass injury do not apply Prodiamine 4SC to turf stressed by conditions such as drought, low fertility, or pest damage.
- Disturbing the herbicide barrier with cultural practices such as disking may result in reduced weed control.
- 5. Do not apply Prodiamine 4SC to golf course putting greens.
- If you consistently mow creeping bentgrass at a height of less than 0.5 inch do not apply Prodiamine 4SC.

Application Timing and Rate - Turfgrass

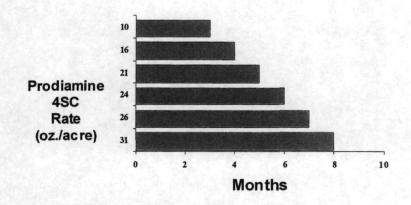
Prodiamine 4SC may be applied as a single application or in sequential applications to control weeds germinating throughout the year. All applications must be made before target weeds germinate because **Prodiamine 4SC will not control weeds that have already emerged**.

The amount of Prodiamine 4SC to apply depends upon:

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

(See the next 2 tables.)

Prodiamine 4SC Length of Crabgrass Control*



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

Annual Use Rates – Turfgrass

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

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

¹Prodiamine 4SC 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.

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

³Use an initial rate of 16-32 oz./A per application.

⁴To avoid grass injury, do not apply Prodiamine 4SC to creeping bentgrass mowed at less than 0.5 inch in height.

Weeds Controlled

When used as directed in this label, Prodiamine 4SC will control the following weeds:

Barnyardgrass

Bluegrass, Annual (Poa annua)1

Carpetweed

Chickweed, Common²

Chickweed, Mouseear (from seed)

Crabgrass (Large, Smooth)³

Crowfootgrass
Cupgrass, Woolly
Foxtails, Annual
Goosegrass ⁵
Henbit²

Henbit⁻ Itchgrass

Johnsongrass (from seed)

Junglerice

Knotweed²

Kochia

Lambsquarters, Common

Lovegrass

Panicum, (Texas, Fall, Browntop)

Piaweed

Purslane, Common Pusley, Florida Rescuegrass⁴ Shepherdspurse²

Signalgrass, Broadleaf Speedwell, Persian

Sprangletop

Spurge, Prostrate

Witchgrass

Woodsorrel, Yellow (from seed)

¹In those areas where *Poa annua* is a winter annual, apply Prodiamine 4SC (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)

²To control this weed, apply Prodiamine 4SC in late summer, fall, or winter before weeds germinate.

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

⁴Suppression only.

⁵In many areas a single application of 21-48 oz./A of Prodiamine 4SC 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 oz./A followed by a second application 60-90 days later. Restriction: Do not exceed the maximum rate for the turf species listed in the Maximum Application Rates Table.

When to Apply Prodiamine 4SC After Overseeding Turf

Injury to desirable seedlings is likely if Prodiamine 4SC 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 Prodiamine 4SC.

When to Overseed After Application - All States

Prodiamine 4SC 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.

*Precaution: 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 Prodiamine 4SC	Interval (Months Before Overseeding)*		
Oz. 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 lb./A.)

How Much Prodiamine 4SC and When to Apply

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

^{*}The amount of Prodiamine 4SC to apply depends upon: the length of residual control desired (the higher the application rate, the longer the control). **Precaution:** 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

Prodiamine 4SC:

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

Ornamental and Christmas Tree Farms - Application Sites and Instructions

Site	Application Instructions
Newly-Transplanted Container or Field	 Delay application until soil has settled around transplants. 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 Container, Field Nursery Stock, or Landscape Plants	Apply at any time as a broadcast, over-the-top, or directed spray.
Landscape (or Ornamental) Plantings	Apply as a broadcast, over-the-top, or as a directed spray.
, 3	Delay applications to newly transplanted ornamentals until soil has settled around transplants.
Bare Ground Application for Container Placement	Apply to soil (including mulch, gravel, wood chips, or other permeable base) upon which containerized ornamentals are placed. After Predigming 45C is applied perform shellow.
	After Prodiamine 4SC is applied, perform shallow cultivation or hand weeding only, to avoid disturbing the herbicide barrier.
In Shadehouses and Uncovered Polyhouses	1. After Prodiamine 4SC is applied, uncovered polyhouses must remain open for at least 7 days and ornamentals must receive 2 irrigations totaling at least ½ inch of water before covering.
Ornamental Bulbs and Perennial Wildflower Plantings	Prodiamine 4SC may be applied to bulbs or perennial wildflower species listed in the section. Apply before or after bulbs emerge but before bulbs bloom and weeds emerge.
	In wildflowers, a postemergence herbicide labeled for wildflowers may be needed to control weeds that have already emerged.

How Much Prodiamine 4SC and When to Apply – Ornamentals

Amount to Apply (Broadcast)*	When to Apply	Comments/Instructions
21–48 oz./A	In fall or spring before weeds germinate or	Use the higher rate for longer control.
or	after weeds are removed.	2. Prodiamine 4SC may be applied more than once per year as long
0.5–1.1 oz./1,000 sq. ft.		as the total amount of product applied does not exceed 48 oz./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 Prodiamine 4SC

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

Tank Mixtures For Use On Ornamentals

Prodiamine 4SC 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 Prodiamine 4SC 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 Prodiamine 4SC on Ornamentals

Product	Precautions/Instructions
Goal® (use on conifers only)	Mix with Prodiamine 4SC for postemergence control of certain broadleaf weeds including malva and filaree.
Gallery®, Princep®, Pennant Magnum®	See product labels for weed spectrum and tolerant ornamentals.
Touchdown Pro®, Roundup® or other glyphosate-based products, Finale®	 These nonselective tank mix herbicides control many emerged annual broadleaves and grasses. 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. 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 Prodiamine. Prodiamine 4SC may be used for application, except in CA, to the species in Table 2. Prodiamine 4SC may be applied over the top of the listed species. The species that are not tolerant to Prodiamine when grown in containers are indicated.

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

Table 1. Tolerant Ornamental Species - All States

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

Cotoneaster apiculatus Cotoneaster buxifolius Cotoneaster dammeri

Cotoneaster microphyllus

Crataegus spp.

Cupressus sempervirens

Delosperma alba Dodonea viscosa Elaeagnus pungens Euonymus fortunei

Euonymus japonica

Cotoneaster **Bearberry Cotoneaster**

Cranberry Cotoneaster

Rockspray Cotoneaster

Hawthorne Italian Cypress

White Trailing Ice Plant

Hop Bush Silverberry Wintercreeper

Japanese Spindle Tree (Evergreen Euonymus)

Scientific name

Common name

Euonymus kiautschovicka

Fatsia japonica Forsythia intermedia Forsythia viridissima Gardenia jasminoides

Gladiolus spp. Hedera helix Hibiscus

Hibiscus Rosa-sinensis

llex cornuta llex crenata llex opaca llex pernyi llex vomitoria lris spp.

Jasminium nudiflorum Juniperus chinensis Juniperus conferta Juniperus horizontalis

Juglans spp.

Justicia brandegeana Lagerstromia indica Ligustrum amurense Ligustrum japonicum Ligustrum lucidum Liriope muscari Lonicera japonica Lonicera tatarica Magnolia spp.

Malus spp.

Nandina domestica Narcissus spp. Nerium spp. Olea europaea

Maleophora luteola

Ophiopogon japonicus Osteospermum fruticosum Oxydendrum arboreum

Persea americana Photinia fraseri

Picea spp.

Spreading Euonymus Japanese Aralia Border Forsythia Greenstem Forsythia Gardenia, Cape-Jasmine Gladiolus species**

English Ivy

Rose of Sharon**
Chinese Hibiscus**
Chinese Holly**
Japanese Holly
American Holly

Holly

Yaupon Holly Iris species** Winter Jasmine Chinese Juniper Shore Juniper Creeping Juniper

Walnut*
Shrimp Plant
Crape Myrtle
Amur Privet
Japanese Privet

Glossy Privet (Wax-Leaf)

Big Blue Lillyturf

Japanese Honeysuckle Tatarian Honeysuckle Magnolia species**

Ice Plant Crabapple*

Heavenly Bamboo Narcissus species**

Oleander Olive*

Mondo Grass**

Trailing African Daisy

Sourwood Avocado*

Frasier's Photinia (Redtip)

Spruce species** (Colorado Blue, Norway, etc.)

Scientific name

Common name

Pieris japonica
Pinus brutia
Pinus canariensis
Pinus elliottii
Pinus halepensis

Pinus naicpensis
Pinus nigra
Pinus palustrus
Pinus radiata
Pinus strobus
Pinus sylvestris
Pinus taeda

Pinus thunbergiana Pinus virginiana

Pistacia spp.

Pittosporum rhombifolium Pittosporum tobira

Podocarpus macrophyllus

Prunus laurocerasus

Prunus spp.

Pseudotsuga menziesii Pyracantha coccinea Pyracantha fortuneana Pyracantha koidzumii

Pyrus spp.
Quercus rubra
Raphiolepsis indica
Rhododendron
(including Azalea)

Rosa banksiae

Rosmarinus officinalis Rumohra adiantiformis

Santolina virens

Sedum album Syzygium paniculatum

Taxus cuspidata Taxus media

Thuja occidentalis

Lily-of-the-Valley Shrub

Calabrian Pine
Canary Island Pine

Slash Pine Aleppo Pine

Austrian Black Pine

Longleaf Pine Monterey Pine Eastern White Pine

Scotch Pine Loblolly Pine

Japanese Black Pine

Virginia Pine Pistachio*

Queensland Pittosporum Japanese Pittosporum

Japanese Yew English Laurel

Almond, Apricot, Nectarine, Peach, Plum and

Prune*

Douglas Fir**
Firethorn Scarlet

Firethorn Firethorn

Bradford Pear spp.

Oak species Indian Hawthorne 'Coral Bells'

'Formosa' 'Hino-crimson' 'PJM'

'Roseum Elegans' Lady Bank's Rose

Rosemary* Leatherleaf Fern

Leathenear rem

Stonecrop

Japanese Boxcherry

Japanese Yew

Yew

American Arborvitae

Scientific name	Common name
Trachelospermum asiatum	Star Jasmine
Tsuga canadensis	Canada Hemlock
<i>Tulipa</i> spp.	Tulip species
Viburnum japonicum	Japanese Viburnum
Viburnum odoratissimum	Sweet Viburnum
Viburnum plicatum	Japanese Snowball
Viburnum rigidum	Canary Island Viburnum
Viburnum tinus	Laurustinus
Viburnum trilobium	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

^{*}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
Achillea spp.	Yarrow: King Edward
Agapanthus orientalis	ŭ
Akebia quintata	Five-Leaf or Chocolate Vine
Allium cernuum	Lady's Leek, Nodding Onion
Anemone hybrida	Japanese Anemone
Aquilegia spp.	Aquilegia: Red and Gold
<i>Artemisia</i> spp.	Wormwood; Silver Mound, Castle
<i>Aster</i> 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 asteroides	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	Caraanaia (Callianaia), Fark, Survina Maankaana
Coreopsis spp.	Coreopsis (Calliopsis): Early Sunrise, Moonbeam Lucifer
Crocosmia spp.	
Delosperma spp.	Cooperi Pink Larkspur; Blue Elf
Delphinium spp. Dianthus deltoides	
	Dianthus, Maiden Pinks 'Zing' Cheddar Pink
Dianthus gratianopolitanus	Coneflower, Purple; Magnus
Echinacea purpurea Forsythia suspensa	Weeping Forsythia
Gaillardia spp.	Gaillardia, Blanket Flower: 'Goblin'
Gainardia spp. Gaura spp.	Galilardia, Biariket i lower. Gobili
Gaura spp. Gentiana dahurica	Gentian
Germana danunca 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 Bloom
Hibiscus spp.	Mallow; Disco Belle White
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

Scientific name

Common name

Hosta plantaginea Hosta sieboldiana

Houttuynia cordata var. variegata

Hydrangea macrophylla

Inula ensifolia Iris ensata Iris siberica

Juniperus davurica

Lagerstromia indica x fauriei

Lantana montevidensis

Lavender spp.

Leontopodium alpinum Ligustrum sinense

Lilium spp.

Liriope muscari var. variegata

Liriope spicata Lobelia cardinalis Loropetalum chinense

Lythrum spp.

Miscanthus sinensis Oenothera missourensis Osmanthus heterophyllus

Paeonia suffruticosa Pennisetum setaceum Perovskia atriplicifolia Physostegia virginiana Quercus shumardii

Raphiolepsis umbellata

Rhododendron (including Azalea)

Rudbeckia spp.
Saxifraga spp.
Scabiosa spp.
Sedum cauticola
Sedum dasyphyllum
Sedum spurium

Sedum spurium Spiraea bumalda Syzygium paniculatum Hosta, Plantain Lily (Fragrant)

Hosta, 'Searsucker'

Bigleaf Hydrangea

Sword-Leaved Iris; Jodlesong

Siberian Iris; Cabernet

Parsoni

Crape Myrtle; Tuscarora

Weeping Lantana Lavender; Munstead

Edelweiss

Chinese Privet; Variegata

Lily: Jazz

Liriope, Variegated Liriope, Creeping

Cardinal Flower, Indian Pink

Burgundy

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

Evening Primrose

Osmanthus (False Holly): Gulf Tide

Tree Peony

Fountain Grass (Dwarf)**

Dragonhead, False; Vivid Oak, Shumard's Red Yedda Hawthorne 'Delaware Valley White'

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

Black-Eyed Susan: Goldstrum

Saxifrage; Purple Dome Pincushion Flower Stonecrop; Lidakense

Stonecrop

Stonecrop; Dragon's Blood Spirea: Anthony Waterer Australian Brushcherry

Scientific name	Common name
Teucrium spp.	Germander
Thalictrum dipterocarpum	Meadow Rue
Veronica spp.	Veronica, Speedwell; Sunny Border
Viburnum suspensum	Arrowood Viburnum

^{**}Restriction: Not for use on container grown plants.

NEW PLANTINGS, REPLANTING AND ROTATIONAL PLANTINGS

Rotate nursery, landscape, or non-cropped land areas treated with Prodiamine 4SC 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, do several test strips of an indicator plant such as wheat, sorghum or corn sown into the treated area. If the indicator plants germinate and grow normally to a height of 12 inches with normal root development, it is safe to plant.

In areas disturbed by new plantings or replanting of labeled species, it may be necessary to retreat exposed soil to maintain satisfactory weed control, but do not apply more than 48 oz./A per year.

STORAGE AND DISPOSAL

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

Pesticide Storage

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

Pesticide Disposal

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

Container Handling [less than 5 gallons]

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of container in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Container Handling [Bulk/Mini-Bulk]

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least once complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Chemigation

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

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For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

Manufactured for: Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

Base Label (1 gal., 10 gal.)

Prodiamine® 4SC

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

Active Ingredient:

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

*CAS No. 29091-21-2

Contains 4 pounds Prodiamine per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA Reg. No. 100-

EPA Est.

1 gallon Net Contents

10 gallons Net Contents

See additional precautionary statements and directions for use inside booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions For Use section for information about this standard.

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 may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

	FIRST AID
If swallowed	 Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor.
	 Do not give anything by mouth to an unconscious person.
If in eyes	 Hold eye open and rinse slowly and gently with water for 15-20 minutes.
	 Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	Call a poison control center or doctor for treatment advice.
If inhaled	Move person to fresh air.
	 If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
	Call a poison control center or doctor for treatment advice.
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 produc	ct container or label with you when calling a poison control center or
doctor or going	· · · · · · · · · · · · · · · · · · ·

doctor, or going for treatment.

HOT LINE NUMBER

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

1-800-888-8372

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.

STORAGE AND DISPOSAL

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Manufactured for: Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

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