

# SUNNILAND PRODIAMINE 65WG

## Herbicide

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

<b>ACTIVE INGREDIENT:</b>	<b>% BY WT.</b>
Prodiamine (CAS No. 29091-21-2) .....	65.0%
<b>OTHER INGREDIENTS:</b> .....	35.0%
<b>TOTAL:</b> .....	100.0%

**KEEP OUT OF REACH OF CHILDREN**

### **CAUTION / PRECAUCIÓN**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

**NET WEIGHT: 6 OZ.**

EPA Reg. No. 53883-429-9404

EPA Est. No. 9404-FL-1-F99



**Manufactured for:**  
Sunniland Corporation  
PO Box 8001  
Sanford, FL 32772

EPA 020520

## FIRST AID

<b>IF IN EYES:</b>	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.
<b>IF ON SKIN OR CLOTHING:</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
<b>IF INHALED:</b>	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 further treatment advice.
<b>IF SWALLOWED:</b>	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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. **You may also contact Prosar at 1-877-250-9291 for emergency medical treatment information.**

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
**CAUTION**

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

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**WPS USES:**

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

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

**Mixers and loaders must wear:**

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

**NON-WPS USES:**

Mixers and loaders who handle this product 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:

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

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 this 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
- Waterproof gloves
- Shoes plus socks

### **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

**Entry Restrictions for Non-WPS Uses:** Do not enter or allow others to enter the treated area until sprays have dried.

### **WATER SOLUBLE PACKETS**

This box contains Sunniland Prodiamine 65WG in 0.5lb. 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.

### **PRODUCT INFORMATION**

#### **WHERE TO USE**

Sunniland Prodiamine 65WG is a preemergence herbicide that provides residual control of many grass and broadleaf weeds in:



- Established turfgrass (excluding golf course putting greens), lawns, and
- Container, field-grown, and landscape ornamentals

### **HOW Sunniland PRODIAMINE 65WG WORKS**

Sunniland Prodiamine 65WG controls susceptible weeds by preventing growth and development of newly germinated weed seeds. Weed control is most effective when Sunniland Prodiamine 65WG 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 RESTRICTIONS**

- Do not graze or feed livestock forage cut from areas treated with Sunniland Prodiamine 65WG.
- Do not apply Sunniland Prodiamine 65WG 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 Sunniland Prodiamine 65WG onto dry fertilizer or any other granular material.
- Chemigation Statement: 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 treated with Sunniland Prodiamine 65WG should be rotated only to ornamental species listed on this label for 1 year following application unless the following test has shown species safety:

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

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

When an adjuvant is to be used with this product, Sunniland Corporation suggests the use of a Chemical Producers and Distributors Association certified adjuvant.

## MIXING AND APPLICATION PROCEDURES

### MIXING (For loose pack)

Sunniland Prodiamine 65WG 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 Sunniland Prodiamine 65WG 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 Prodiamine 65WG 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 the Pesticide Disposal section of this label for waste disposal.

**MIXING (For water soluble packets)**

Sunniland Prodiamine 65WG 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 Sunniland Prodiamine 65WG 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 Prodiamine 65WG 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 the Pesticide Disposal section of this label for waste disposal.

**TANK MIXING SUNNILAND PRODIAMINE 65WG**

Sunniland Prodiamine 65WG 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 Prodiamine 65WG 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 Sunniland Prodiamine 65WG 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 qt. jar would be 1/100 the volume of a 25 gal./acre spray rate. At 1 lb./acre, the Prodiamine 65WG rate would be proportional to 4.5 g per quart. Add approximately 1.5 teaspoons to a qt. of water. Calculate amounts for other products based on rate per acre. An approximate volume would be 1.5 teaspoons for each lb./acre of a dry formulation and 0.5 teaspoons for each pt./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./Acre)**

<b>COMPONENTS FORMULATIONS</b>	<b>RATE PER ACRE</b>	<b>RATE PER 1,000 SQ. FT.</b>	<b>LEVEL TEASPOONS</b>
Sunniland Prodiamine 65WG	1.0 lb.	0.4 oz.	1.5
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. 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 Sunniland Prodiamine 65WG 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 Sunniland Prodiamine 65WG in a minimum of 20 gals./acre (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.

## **SPECIAL USE DIRECTIONS ESTABLISHED TURF**

Sunniland Prodiamine 65WG is a preemergence herbicide that, when properly applied, will control certain grass and broadleaf weeds in established turfgrasses including:

- golf courses *excluding* putting greens
- lawns

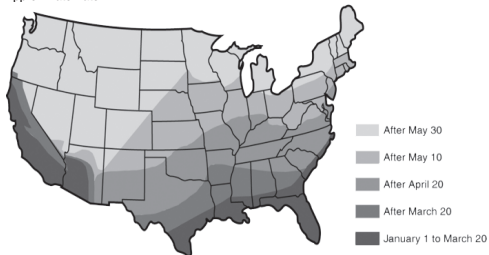
The maximum amount of Sunniland Prodiamine 65WG that may be applied per year is given for each turfgrass species in the Annual Use Rates-Turfgrass section of this label.

For optimum weed control, Sunniland Prodiamine 65WG 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 Restrictions-Turfgrass**

1. Do not apply Sunniland Prodiamine 65WG 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. Do not apply Sunniland Prodiamine 65WG to golf course putting greens.

### **Use Precautions- Turfgrass**

1. To avoid turfgrass injury, do not apply Prodiamine 65WG to turf stressed by conditions such as drought, low fertility, or pest damage.
2. Disturbing the herbicide barrier with cultural practices such as disking may result in reduced weed control.
3. If the depth of the creeping bentgrass root system becomes shallow and root tips contact prodiamine-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 Sunniland Prodiamine 65WG to creeping bentgrass less than 0.5 inch in height.

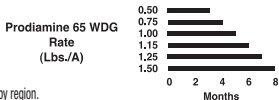
### Application Timing and Rate-Turfgrass

Sunniland Prodiamine 65WG 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. Sunniland Prodiamine 65WG will not control weeds that have already emerged. The amount of Sunniland Prodiamine 65WG to apply is based upon:

The amount of Sunniland Prodiamine 65WG 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 maximum amount which can be applied to the turf species per calendar year (see Table 1).

Figure 1: Length of Crabgrass Control



\*Length of control varies by region.

This table is an average for planning purposes.

### Annual Use Rates-Turfgrass

Sunniland Prodiamine 65WG 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**  
**Prodiamine 65WG per calendar year by Turfgrass Species<sup>1</sup>**

<b>TURF SPECIES</b>	<b>LBS. OF PRODUCT/ACRE</b>	<b>OZ. OF PRODUCT/1,000 SQ. FT.</b>
Bermudagrass <sup>2</sup> Bahagrass Centipedegrass Kikuyugrass Seashore Paspalum St. Augustinegrass <sup>3</sup> Tall Fescue (including turf-type) Zoysia grass	1.0 - 2.30 <sup>1</sup>	0.36 - 0.83

*continued*

*continued*

Buffalo grass Kentucky Bluegrass Perennial Ryegrass	0.5 - 1.50 <sup>1</sup>	0.185 - 0.55
Fine Fescue	0.5 - 1.15 <sup>1</sup>	0.185 - 0.42
Creeping Bentgrass (0.5 inches or more in height) <sup>4</sup>	0.5 - 1.00 <sup>1</sup>	0.185 - 0.37

<sup>1</sup>Sunniland Prodiamine 65WG 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.

<sup>2</sup>May be used 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.

<sup>3</sup>Use an initial rate of 0.75-1.5 lbs. / acre (0.28-0.55 oz./1000 sq. ft.) per application.

<sup>4</sup>To avoid grass injury, do not apply Sunniland Prodiamine 65WG to creeping bentgrass mowed at less than 0.5 inch in height.

### **Weeds Controlled (Turf, Ornamentals)**

**When used as directed in this label, Sunniland Prodiamine 65WG will control the following weeds:**

- Barnyardgrass
- Bluegrass, Annual (*Poa annua*)<sup>1</sup>
- Carpetweed
- Chickweed, Common<sup>2</sup>
- Chickweed, Mouseear (from seed)
- Crabgrass (Large, Smooth)<sup>3</sup>
- Crowfoot grass
- Cupgrass, Woolly
- Henbit<sup>2</sup>
- Itchgrass
- Johnsongrass (from seed)
- Junglerice
- Knotweed<sup>2</sup>
- Kochia
- Lambsquarters, Common
- Lovegrass
- Purslane, Common
- Pusley, Florida
- Rescuegrass<sup>4</sup>
- Shepherdspurse<sup>2</sup>
- Signalgrass, Broadleaf
- Speedwell, Persian
- Sprangletop
- Spurge, Prostrate

- Foxtails, Annual
- Goosegrass<sup>5</sup>
- Panicum (Texas, Fall, Browntop)
- Pigweed
- Witchgrass
- Woodsorrel, Yellow (from seed)

<sup>1</sup>In areas where *Poa annua* is a winter annual, apply Sunniland Prodiamine 65WG (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".

<sup>2</sup>To control this weed, apply Sunniland Prodiamine 65WG in late summer, fall, or winter before weed seeds germinate.

<sup>3</sup>Fall Applications for Spring Crabgrass Control in Cool-Season Grasses: In those areas where the ground freezes in the winter, Sunniland Prodiamine 65WG can be applied in the fall at rates of 1.0-1.15 lbs./acre after the soil temperature falls below 50oF but before the ground freezes. This application will control crabgrass the following spring.

<sup>4</sup>Suppression only.

<sup>5</sup>In many areas, a single application of 1.0-2.3 lbs./acre of Sunniland Prodiamine 65WG 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 SUNNILAND PRODIAMINE 65WG AFTER OVERSEEDING TURF**

Injury to desirable seedlings is likely if Sunniland Prodiamine 65WG 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 Sunniland Prodiamine 65WG.

**When to Overseed After Application (All States)\*** - Sunniland Prodiamine 65WG 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 SUNNILAND PRODIAMINE 65WG	INTERVAL (MONTHS) BEFORE OVERSEEDING*		
	North	Transition	South
Lbs. of Product/Acre			
0.75	4	4	4
1.00	5	4	4
1.15	6	5	5
1.25	-	6	6
1.50	-	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 when overseeding with perennial ryegrass (minimum seeding rate of 350 lbs./A).

## HOW MUCH AND WHEN TO APPLY

AMOUNT TO APPLY	WHEN TO APPLY	EXPECTED CONTROL	USE RESTRICTIONS
0.58-1.0 lb./acre	6 to 8 weeks <i>before</i> ryegrass overseeding  Second Application: 4 to 8 weeks <i>after</i> 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.	Do not make a second application if any injury to the ryegrass is observed after the first application.  Do not make a second application unless the product was first applied before overseeding.  Make no more than 2 applications per year for this use, and do not exceed a total of 1.3 lbs./acre per year. <u>Use Precautions</u>  Some seedling mortality and temporary reduction in root growth of new seedlings may occur.  To reduce the potential for seedling mortality, maintain a moist seedbed with light, frequent irrigation.

***Poa annua* control 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**

<b>AMOUNT TO APPLY</b>	<b>WHEN TO APPLY</b>	<b>EXPECTED CONTROL</b>	<b>USE PRECAUTIONS</b>
0.58-1.0 lb./acre	8 to 10 weeks <i>before</i> ryegrass overseeding	70% or greater	Some seedling mortality and temporary reduction in root growth of new seedlings may occur. To reduce the potential for seedling mortality maintain a moist seedbed with light, frequent irrigation. 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.

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

**Application Timing and Information**

Sunniland Prodiamine 65WG:

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 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. In the spring when buds are rapidly growing and expanding, over-the-top application of Sunniland Prodiamine 65WG may temporarily injure new growth of desirable plants. To

reduce the possibility of injury at this time, wait to apply Sunniland Prodiamine 65WG over the top of newly emerged vegetation until it has hardened off unless 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 Sunniland Prodiamine 65WG from plant surfaces onto soil (watering plants before application may improve the washing process).

#### **Application Sites and Instructions**

<b>SITE</b>	<b>APPLICATION INSTRUCTIONS</b>
Newly-Transplanted Container or Field Nursery Stock	Delay application until soil has settled around transplants. Water transplants thoroughly before application. Apply after cuttings form roots and are established. To avoid inhibition of the tissue union, apply before budding/grafting or after buds/grafts have taken.

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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 directed spray. Delay application 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 Sunniland Prodiamine 65WG is applied, perform shallow cultivation or hand weeding only, to avoid disturbing the herbicide barrier.
Ornamental Bulbs and Perennial Wildflower Plantings	Sunniland Prodiamine 65WG may be applied to bulbs or perennial wildflower species listed in the section "Tolerant Ornamental Species." 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 AND WHEN TO APPLY**  
**(Container, Field Grown, and Landscape Ornamentals)**

<b>AMOUNT TO APPLY (BROADCAST)*</b>	<b>WHEN TO APPLY</b>	<b>COMMENTS/INSTRUCTIONS</b>
1.0 - 2.3-lbs/acre or 0.37 - 0.83 oz./1,000 sq. ft.	In the fall or spring before weeds germinate or after weeds are removed	Use the higher rate for longer control Sunniland Prodiamine 65WG may be applied more than once per year as long as the total amount of product applied does not exceed 2.3 lbs./ acre per year

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

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{broadcast rate} = \text{amount to apply per acre of field}$$

## EQUIVALENT MEASUREMENTS For Sunniland Prodiamine 65WG

lbs./acre	oz./1,000 sq. ft.	Approximate Equivalent - Tablespoons/1,000 sq. ft.
1.0	0.37	1
1.5	0.55	1.5
2.0	0.74	2
2.3	0.83	2.25

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

Sunniland Prodiamine 65WG 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 65WG 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 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 Sunniland Prodiamine 65WG on Ornamentals

PRODUCT	PRECAUTIONS/INSTRUCTIONS
Goal® or Galigan® (use on conifers only)	Mix with Sunniland Prodiamine 65WG for postemergence control of certain broadleaf weeds including malva and filaree.
Gallery®, Princep®, Pennant®	See product labels for weed spectrum and tolerant ornamentals.

*continued*

*continued*

<p>Touchdown®Pro (or other glyphosate-based products), Reward® and Finale®</p>	<p>These nonselective tank mix herbicides control most emerged annual broadleaves and grasses. 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 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.</p>
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**Tolerant Ornamental Species- Container, Field Grown, and Landscape Ornamentals**

Sunniland Prodiamine 65WG will not harm most trees, shrubs, vines, and flowers. The species listed below in Table 2 are tolerant to Sunniland Prodiamine 65WG. Sunniland Prodiamine 65WG is approved for application, except in CA, to the species in Table 3. Sunniland Prodiamine 65WG may be applied over-the-top of the listed species.

# Prodiamine 65 WDG

*Broad Spectrum Pre-Emergent Herbicide*

**Pre-emergent grass and broadleaf weed control. Flexible application allows for both spring and fall use providing season long crabgrass control.**

- Effectively controls Annual Bluegrass
- Non-Staining
- Excellent tank mix partner with fertilizers and iron solutions
- Low solubility and volatility — stays in the weed germination zone
- Active ingredient rate as low as 1/4 the rate of other pre-emergent herbicides

**Pre-emergent control of Crabgrass and 31 other problem weeds including:**

Henbit	Chickweed
Annual Bluegrass	Goosegrass
Knotweed	Spurge
Foxtail	

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#### **Formulation**

65% a.i. water dispersible granule

#### **Application Rates**

See label for specific uses and rates.

#### **Active Ingredient**

Prodiamine

#### **Mode of Action**

Pre-emergent

#### **Equivalent Brand**

Syngenta Barricade® 65 WG

#### **Signal Word**

Caution

#### **Packaging**

6 x 5 pound jugs/case  
(36 cases/pallet)

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# PrimeraOne® Prodiamine 65WDG Herbicide

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 5/26/2015

Version: 1.0

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

### 1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** PrimeraOne® Prodiamine 65WDG Herbicide

**Synonyms:** Prodiamine, 65%

**Other means of identification:** Group 3 Fungicide; EPA Reg. No. 60063-26

### 1.2. Intended Use of the Product

**Use of the substance/mixture:** Weed killing compound

### 1.3. Name, Address, and Telephone of the Responsible Party

#### Manufacturer

Sipcam Agro USA, Inc.

2525 Meridian Parkway, Suite 350

Durham, NC 27713

T 919-226-1195

### 1.4. Emergency Telephone Number

**Emergency Number** : (800) 424-9300 CHEMTREC (transportation and spills)

(800) 900-4044 Poison Control Center (human health)

(800) 345-4735 ASPCA (animal health)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

#### Classification (GHS-US)

Eye Dam. 1 H318

### 2.2. Label Elements

#### GHS-US Labeling

#### Hazard Pictograms (GHS-US)



#### Signal Word (GHS-US)

: Danger

#### Hazard Statements (GHS-US)

: H318 - Causes serious eye damage

#### Precautionary Statements (GHS-US)

: P280 - Wear eye protection, protective gloves

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor

### 2.3. Other Hazards

No additional information available

### 2.4. Unknown Acute Toxicity (GHS-US)

8% of the mixture consists of ingredient(s) of unknown acute toxicity.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product Identifier	%	Classification
Prodiamine	CAS No 29091-21-2	65	Not classified
Silica, amorphous	CAS No 7631-86-9	≤1	Skin, Eye, Respiratory

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation:** When symptoms occur: go into open air and ventilate suspected area.

# PrimeraOne® Prodiamine 65WDG Herbicide

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes.

**First-aid Measures After Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**First-aid Measures After Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor/physician.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Causes serious eye damage.

**Symptoms/Injuries After Inhalation:** Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.

**Symptoms/Injuries After Skin Contact:** May cause an allergic reaction in sensitive individuals. May cause skin irritation.

**Symptoms/Injuries After Eye Contact:** Causes serious eye damage.

**Symptoms/Injuries After Ingestion:** May be harmful if swallowed.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Alcohol foam, carbon dioxide, dry chemical, water spray, fog. Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. A heavy water stream may spread burning fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Firefighting Instructions:** Exercise caution when fighting any chemical fire.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Other information:** Do not allow run-off from fire fighting to enter drains or water courses. De-contaminate equipment or materials involved in pesticide fires.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Handle in accordance with good industrial hygiene and safety practice.

#### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel. Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection. Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely.

### 6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

**Incompatible Products:** Strong acids. Strong bases. Strong oxidizers.

**Storage Area:** Store locked up.

### 7.3. Specific End Use(s) Weed killing compound

# PrimeraOne® Prodiamine 65WDG Herbicide

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control Parameters

Silica, amorphous (7631-86-9)		
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	80 mg/m <sup>3</sup> /%SiO <sub>2</sub>

#### 8.2. Exposure Controls

**Appropriate Engineering Controls** : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

**Personal Protective Equipment** : Protective goggles. Gloves.



**Hand Protection** : Wear chemically resistant protective gloves.

**Eye Protection** : Chemical goggles or safety glasses.

**Respiratory Protection** : In case of insufficient ventilation, wear suitable respiratory equipment.

**Other Information** : When using, do not eat, drink or smoke.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Tan.
Odor	: No data available
Odor Threshold	: No data available
pH	: 8.66
Relative Evaporation Rate (butylacetate=1)	: No data available
Melting Point	: 252.5-254.5 °C (486.5-490.1 °F)
Freezing Point	: No data available
Boiling Point	: decomposes @ 240°C
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: Not flammable
Vapor Pressure	: 0.0033 mPa @25°C
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available
Specific Gravity	: 1.47 @25°C
Density	: 0.63 g/ml
Solubility	: Water: 0.013 ppm @25°C
Log Pow	: No data available
Log Kow	: No data available
Viscosity, Kinematic	: No data available
Viscosity, Dynamic	: No data available
Explosive Properties	: Not explosive
Oxidizing Properties	: No data available
Explosive Limits	: Not applicable

**9.2. Other Information** No additional information available

### SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity:** Hazardous reactions will not occur under normal conditions.

**10.2 Chemical Stability:** Product is stable.

**10.3 Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

# PrimeraOne® Prodiamine 65WDG Herbicide

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

- 10.4 Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures.  
**10.5 Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.  
**10.6 Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>). Sulfur oxides. Silicon oxides.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information On Toxicological Effects

**Acute Toxicity** : Not classified  
Silica, amorphous: Dusts in high concentrations may cause skin, eye and respiratory tract irritation.

**Skin Corrosion/Irritation:** Not classified pH: 8.66  
**Serious Eye Damage/Irritation:** Causes serious eye damage. pH: 8.66  
**Respiratory or Skin Sensitization:** Not classified  
**Germ Cell Mutagenicity:** Not classified  
**Carcinogenicity:** IARC Group 2B

<b>Silica, amorphous (112926-00-8)</b>	
<b>IARC group</b>	3

**Reproductive Toxicity:** Not classified  
**Specific Target Organ Toxicity (Single Exposure):** Not classified  
Silica, amorphous: Skin, eye, respiratory tract  
**Specific Target Organ Toxicity (Repeated Exposure):** Not classified  
**Aspiration Hazard:** Not classified  
**Potential Adverse Human Health Effects and Symptoms:** Causes serious eye damage.  
**Symptoms/Injuries After Inhalation:** Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.  
**Symptoms/Injuries After Skin Contact:** May cause an allergic reaction in sensitive individuals. May cause skin irritation.  
**Symptoms/Injuries After Eye Contact:** Causes serious eye damage.  
**Symptoms/Injuries After Ingestion:** May be harmful if swallowed.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Not applicable

### 12.2. Persistence and Degradability

<b>PrimeraOne® Prodiamine 65WDG Herbicide</b>	
<b>Persistence and Degradability</b>	Not established.

### 12.3. Bioaccumulative Potential

<b>PrimeraOne® Prodiamine 65WDG Herbicide</b>	
<b>Bioaccumulative Potential</b>	Not established.

**12.4. Mobility in Soil** No additional information available  
**12.5. Other Adverse Effects**  
**Other Information** : Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

## SECTION 14: TRANSPORT INFORMATION

### 14.1 In Accordance with DOT

**Proper Shipping Name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.  
**Hazard Class** : 9  
**Identification Number** : UN3077  
**Label Codes** : 9  
**Packing Group** : III  
**ERG Number** : 171



### 14.2 In Accordance with IMDG

# PrimeraOne® Prodiamine 65WDG Herbicide

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**Proper Shipping Name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

**Hazard Class** : 9

**Identification Number** : UN3077

**Packing Group** : III

**Label Codes** : 9

**EmS-No. (Fire)** : F-A

**EmS-No. (Spillage)** : S-F



### 14.3 In Accordance with IATA

**Proper Shipping Name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

**Packing Group** : III

**Identification Number** : UN3077

**Hazard Class** : 9

**Label Codes** : 9

**ERG Code (IATA)** : 9L



## SECTION 15: REGULATORY INFORMATION

### 15.1 US Federal Regulations

#### PrimeraOne® Prodiamine 65WDG Herbicide

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

#### 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, while mixing or handling the concentrated material, may cause allergic reactions in some individuals.

**SARA Section 311/312 Hazard Classes**

Immediate (acute) health hazard

### 15.2 US State Regulations

#### Silica, amorphous (112926-00-8)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: OTHER INFORMATION

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

#### GHS Full Text Phrases:

Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
H232	May form combustible dust concentrations in air
H318	Causes serious eye damage

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. SDS US (GHS HazCom)*