

# 15-0-4(25%PSCU) .37% Cavalcade

For selective preemergence control of grass and broadleaf weeds in:

- Established turf grasses (excluding golf course putting greens) and lawns
- Landscape ornamentals (including established perennials and wildflower plantings)

### ACTIVE INGREDIENT:

Prodiamine: N<sup>3</sup>, N<sup>3</sup>-Di-n-propyl-2,4-dinitro-6-(trifluoromethyl)-m-phenylenediamine.....100.37%

INERT INGREDIENTS:.....99.63%

TOTAL:.....100.00%

EPA Reg. No. 60063-28-534

EPA Est. No. 075527-PA-12

Cavalcade™ is a trademark of Sipcam Agro USA, Inc.

Distributed by:

GROWMARK, Inc., 1701 Towanda Avenue, IL 61701

**KEEP OUT OF REACH OF CHILDREN  
PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION:** Causes moderate eye injury (irritation). Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling. Prolonged or repeated skin contact with product may cause allergic reactions in some individuals.

**ENVIRONMENTAL HAZARDS:** This product has low solubility in water. At the limits of solubility, this product is not toxic to fish. However, at concentrations 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 washwaters.

| First Aid                     |                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>if in eyes</b>             | <ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>                                                            |
| <b>if on skin or clothing</b> | <ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>                                                                                                                              |
| <b>if swallowed</b>           | <ul style="list-style-type: none"> <li>Call a poison control center or physician immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or physician.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul> |
| <b>if inhaled</b>             | <ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>                                                           |

**Hot line number:**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Telecommunications Network at 1-800-868-7378.

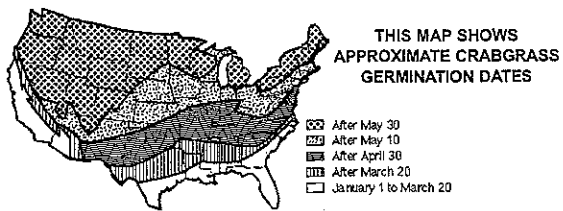
**DIRECTIONS FOR USE:** It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Not for use on plants being grown for sale or other commercial use, for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown in ornamental gardens or parks, or on golf courses or lawns and grounds. This product is a selective preemergence herbicide that provides residual control of many grass and broadleaf weeds in established lawns and ornamental turf (excluding golf course putting greens), landscape ornamentals and established perennials and wildflower plantings. It controls susceptible weeds by inhibiting weed seeds germination and root development. When used according to directions, it will control: barnyardgrass; bluegrass, annual (*Poa annua*); carpenterweed; chickweed, common; chickweed, mouseear (from seed); crabgrass (large, smooth); crowfootgrass; cugrass, woolly; foxtails, annual; goosegrass; henbit; itchgrass; johnsongrass (from seed); juncelrice; knotweed; Kochia; lambsquarters, common; lovegrass; panicum (Texas, fall, brown-top); pigweed; purslane, common; pusley, Florida; rescuegrass; shepherd's purse; signalgrass, broadleaf; speedwell, Persian; sprangletop; spurge, prostrate; witchgrass; woodsorrel, yellow (from seed).

<sup>1</sup> In many areas a single application of 4 to 9.3 pounds / 1000 square feet will control goosegrass. However, under heavy goosegrass pressure and/or an extended growing season, most effective weed control may be obtained with an initial application of 4 to 6.2 pounds / 1000 square feet, followed after 60 to 90 days by a second application at doses that would not exceed the maximum annual rate (see Minimum and Maximum Application Rate table).

<sup>2</sup> For this weed, apply in late summer, fall or winter prior to germination.

<sup>3</sup> Suppression only.

**WHEN TO APPLY TO ESTABLISHED TURF:** This product must be applied prior to germination of weed seeds, as it will not control established weeds.



**APPLICATION DIRECTIONS:** Apply this product uniformly, using a suitable spreader that has been properly calibrated. Most effective weed control will be obtained when this product is activated by at least 0.5 inch of rainfall or irrigation, or with shallow (1 to 2 inches) incorporation, prior to weed seed germination and within 14 days after application.

**USE PRECAUTIONS:** The following precautions apply to the use of this product in turf grasses and lawns. Application of this product may thin emerged annual bluegrass and newly overseeded grasses. Do not apply to overseeded turf within 60 days after seeding or until after the second mowing, whichever is longer. Injury to desirable seedlings is likely if this product is applied before seeding secondary roots are in the second inch of soil (not thatch plus soil). Do not apply to newly set sod until the following year. Application to turf stressed by drought, low fertility, or pest damage may result in turf injury. Disturbing the herbicide barrier with cultural practices (such as core aeration) may result in reduced weed control. Do not apply to putting greens, or areas where dichondra, colonial bentgrass, velvet bentgrass or annual bluegrass (*Poa annua*) are desirable species. Do not apply through any type of irrigation system. Do not apply aerially. Do not graze or feed livestock forage cut from treated areas.

**RATES OF APPLICATION:** This product is recommended for use on the turf grass species listed in the following table. The maximum amount of this product that may be applied per year is given for each turf grass species. Do not exceed the maximum yearly rate listed:

| Turf Species                            | Minimum and Maximum Application Rates (by Turf Grass Species) |                                      |
|-----------------------------------------|---------------------------------------------------------------|--------------------------------------|
|                                         | Minimum Rate                                                  | Maximum Annual Rate                  |
| Bahieggrass, Centipedegrass             | 4 pounds per 1000 sq. ft.                                     | 9.3 pounds per 1000 sq. ft. per year |
| Bermudagrass <sup>1</sup> , Zoysiagrass | 4 pounds per 1000 sq. ft.                                     | 9.3 pounds per 1000 sq. ft. per year |
| Seashore Paspalum                       | 4 pounds per 1000 sq. ft.                                     | 9.3 pounds per 1000 sq. ft. per year |
| St. Augustinegrass                      | 4 pounds per 1000 sq. ft.                                     | 9.3 pounds per 1000 sq. ft. per year |
| Tall Fescue (including turf-type)       | 4 pounds per 1000 sq. ft.                                     | 9.3 pounds per 1000 sq. ft. per year |
| Buffalograss                            | 4 pounds per 1000 sq. ft.                                     | 6.2 pounds per 1000 sq. ft. per year |
| Kentucky Bluegrass                      | 4 pounds per 1000 sq. ft.                                     | 6.2 pounds per 1000 sq. ft. per year |
| Perennial Ryegrass                      | 4 pounds per 1000 sq. ft.                                     | 6.2 pounds per 1000 sq. ft. per year |
| Creeping Red Fescue                     | 4 pounds per 1000 sq. ft.                                     | 4.6 pounds per 1000 sq. ft. per year |
| Creeping Bentgrass                      | 4 pounds per 1000 sq. ft.                                     | 4.0 pounds per 1000 sq. ft. per year |

These are the maximum rates per calendar year. May be used on newly sprigged or plugged Bermudagrass at rates not to exceed 9.3 lbs / 1000 square feet. Newly sprigged or plugged Bermudagrass stolion rooting may be temporarily retarded. Suppression only of foxtail, goosegrass and rescuegrass due to reduced rates used in sprigging situations. This product may be applied as a single application or in sequential applications to control weeds germinating throughout the year. Sequential applications may be made so long as the total amount of product applied does not exceed the maximum annual application rates recommended for each turf species. The length of time of residual weed control provided by this product is related to the rate applied. Use the higher rates listed for longer periods of weed control.

**WHEN TO OVERSEED AFTER APPLICATION:** This product will inhibit germination of turf seed if overseeded too soon after application. Follow rates and intervals in table for best overseeding/ reseeding results.

**LANDSCAPE ORNAMENTALS** (including established perennials and wildflower plantings): This product may be applied for residual preemergence weed control in ornamentals. Apply at the rate of 4 to 9.3 lbs per 1000 square feet in fall and/or spring. Use higher rates of application for longer control periods. Sequential or single applications are allowed so long as the total amount of product applied does not exceed the maximum annual application rate of 9.3 lbs / 1000 square feet per year.

**APPLICATION TIMING AND INFORMATION:** This product may be applied to newly transplanted and established ornamentals a broadcast, over the top or directed application. Around new transplants, delay application to allow soil to settle and water thoroughly before applying. Apply after emerging form roots and become established. Apply before budding/grafting or after buds/grafts have taken to avoid any inhibition of the tissue union. This product is a preemergence herbicide and will not control emerged weeds. Most effective weed control in ornamentals will be obtained when this product is activated by at least 0.5 inch of rainfall or irrigation, or with shallow (1 to 2 inch) mechanical incorporation, prior to weed seed germination and within 14 days following application. Best weed control is obtained when applied to soil free of weeds, weeds, and debris such as leaves. Prior to application, control existing vegetation by hand weeding, cultivation or the use of an appropriate postemergence herbicide.

| Use Rate<br>lbs / 1000 sq. ft. | Weeks Before Overseeding |            |       |
|--------------------------------|--------------------------|------------|-------|
|                                | North                    | Transition | South |
| 3 lbs                          | 4                        | 4          | 4     |
| 4.6 lbs                        | 6                        | 5          | 5     |
| 4.9 lbs                        | 6                        | 6          | 6     |
| 6.2 lbs                        | 7                        | 7          | 7     |
| 7 lbs                          | 8                        | 8          | 8     |
| 8 lbs                          | 9                        | 9          | 9     |
| 9.3 lbs                        | 10                       | 10         | 12    |

| SPREADER SETTINGS to apply at the listed pounds per 1000 square feet | SPREADER SETTINGS |        |          |         |           |
|----------------------------------------------------------------------|-------------------|--------|----------|---------|-----------|
|                                                                      | 3 lbs             | 4 lbs  | 4.6 lbs  | 6.2 lbs | 8 lbs     |
| Spyker 24-22 Rotary                                                  | 4.0               | 4.5    | 4.75     | 5.0     | 4.5 x2    |
| Lesco Rotary                                                         | 11 (E-F)          | 14 (G) | 15 (G-H) | 16 (H)  | 14 (G) x2 |
| Prizelawn CB Rotary                                                  | 4.3               | 4.75   | 5.0      | 5.5     | 4.75 x2   |
| EarthWay 2400 Rotary                                                 | 16                | 19     | 19       | 20      | 19 x2     |
| Cyclone Pro                                                          | 3.6               | 4.5    | 4.5      | 5.0     | 4.5 x2    |
| Scotts R6A                                                           | H                 | J      | K        | L       | J x2      |
| Lely Broadcast                                                       | 2.6               | 3.4    | 3.5      | 3.8     | 3.4 x2    |
| Bigfoot                                                              | G-H               | I      | I-J      | J       | 1 x2      |

**TOLERANT ORNAMENTAL SPECIES:** This product will not harm most ornamental trees, shrubs, vines and flowers. The species listed below are tolerant to this product. Best results will be obtained when product is uniformly applied to ornamental shrubs, which may defeat the effort to get uniform distribution on the soil surface. This product may be applied over the top of these species. When plants are under stress (such as heat, drought or frost damage) some cultivars of listed plants may be sensitive to this product.

| SCIENTIFIC NAME         | COMMON NAME                  | SCIENTIFIC NAME            | COMMON NAME                                           |
|-------------------------|------------------------------|----------------------------|-------------------------------------------------------|
| Abies spp.              | Fir species* (Balsam, etc.)  | Malephora luteola          | Ice Plant                                             |
| Acer palmatum           | Japanese Maple               | Malus sp.                  | Crabapple                                             |
| A. platanoides          | Norway Maple                 | Nandina domestica          | Heavenly Bamboo                                       |
| Adiantum chinensis      | Kawf                         | Olea europaea              | Olive*                                                |
| Asplenium adnigrum      | Winged-leaf (African Lily)   | Ophiopogon japonicus       | Monard Grass                                          |
| Asplenium densiflorum   | Vine Hill Manzanilla         | Osteospermum frutescens    | Trailing African Daisy                                |
| Arctostaphylos uva-ursi | Cape Weed                    | Oxydendrum arboreum        | Sourwood                                              |
| Asplenium platyneuron   | Japanese Aucuba              | Persea americana           | Avocado*                                              |
| Berberis gladiolifera   | Barberry                     | Photinia fraseri           | Fraser's Photinia (Redtip)                            |
| B. julianae             | Wintergreen Barberry         | Picea spp.                 | Spruce species**                                      |
| B. menthifolia          | Japanese Barberry            | Pilea japonica             | Lily-of-the-Valley Bush                               |
| B. thunbergii           | Japanese Barberry            | Pinus brutia               | Calabrian Pine                                        |
| Buxus microphylla       | Japanese Boxwood             | P. carolinensis            | Canary Island Pine                                    |
| Calluna vulgaris        | Waxmyrtle                    | P. halepensis              | Algarro Pine                                          |
| Calluna vulgaris        | Scotch Heather               | P. nigra                   | Australian Pine                                       |
| Carpobrotus edulis      | Hottentot Fig (Ice Plant)    | P. radiata                 | Monterey Pine                                         |
| Cassia artemisioides    | False Indigo                 | P. thunbergiana            | Japanese Black Pine                                   |
| Ceanothus rigidus       | Wild Lilac                   | P. strobus                 | Eastern White Pine                                    |
| Chamaecyparis pisifera  | False Cypress                | P. sylvestris              | Scotch Pine                                           |
| Clematis japonica       | Clematis                     | P. taeda                   | Red Pine                                              |
| Citrus spp.             | Citrus species*              | Pittosporum rhotundifolium | Queensland Pittosporum                                |
| Cornus florida          | Flowering Dogwood            | P. tobira                  | Japanese Pittosporum                                  |
| C. paniculata           | American Dogwood             | Pseudotsuga macrophyllum   | Japanese Yew                                          |
| Cordieria alliodora     | Pampas Grass                 | Prunus laurocerasus        | English Laurel                                        |
| Cotoneaster argentea    | Craberry Cotoneaster         | Prunus sp.                 | Almond, Apricot, Nectarine, Peach, Plum and Prunes*   |
| C. dammeri              | Barberry Cotoneaster         | Pyraeantha coccinea        | Firethorn (Scarlet)                                   |
| C. microphylla          | Rocky Mountain Cotoneaster   | P. fortuneana              | Firethorn                                             |
| Crataegus spp.          | Hawthorn                     | P. kowitzkii               | Firethorn                                             |
| C. stramonium           | Witch-hazel                  | Pyrus sp.                  | Bradford Pear sp.                                     |
| Dalechampia alba        | Italian Cypress              | Quercus spp.               | Oak species                                           |
| Delphinium spp.         | White Trailing Ice Plant     | Raphanistrum indicum       | Indian Hawthorne                                      |
| Desmodium illinoense    | Larkspur, Blue Elf           | Rhododendron               | Coral Bell                                            |
| Elaeagnus pungens       | Hop Yew                      | Rosa spp.                  | "Formosa," "Hino-Ornison," "PJM," "Roseum Elegans"    |
| Euphorbia fortunei      | Steviberry                   | Rosa banksia               | Lady Banksia Rose                                     |
| E. japonica             | Winterreeper                 | Rosmarinus officinalis     | Rosemary                                              |
| E. kauschovicia         | Evergreen Euonymus           | Santolina virans           | Santolina                                             |
| Fatsia japonica         | Spreeding Euonymus           | Sarcocolla alba            | Sarcocolla                                            |
| Ficus intermedia        | Japanese Aralia              | Syzygium paniculatum       | Japanese Brushcherry                                  |
| F. virens               | Borders Forsythia            | Taxus cuspidata            | Japanese Yew                                          |
| Gardenia jasminoides    | Gardenia, Cape-Jasmine       | T. media                   | Yew                                                   |
| G. xanthipes            | English Yew                  | Thuja occidentalis         | American Arborvitae                                   |
| Hibiscus rosa-sinensis  | Chinese Hibiscus             | Trachelospermum asiaticum  | Star Jasmine                                          |
| Ilex cornuta            | Chinese Holly                | Yucca carolinensis         | Canada Hemlock                                        |
| I. pedunculata          | Japanese Holly               | Viburnum japonicum         | Japanese Viburnum                                     |
| I. opaca                | American Holly               | V. odoratissimum           | Sweet Viburnum                                        |
| Iris spp.               | Iris species*                | V. plicatum                | Japanese Snowball                                     |
| Juniperus nudiiformis   | Winter Jasmine               | V. rigidum                 | Canary Island Viburnum                                |
| Juniperus chinensis     | Chinese Juniper              | V. tinus                   | Laurustinus                                           |
| J. conferta             | Shore Juniper                | V. rotundifolius           | Cranberry Bush                                        |
| J. horizontalis         | Creeping Juniper             | V. vitifolius              | Leatherleaf Viburnum                                  |
| Juglans sp.             | Walnut                       | Vinca major                | Greater Periwinkle, Vinca                             |
| Justicia brandegeana    | Shrimp Plant                 | Vinca minor                | Common Periwinkle, Vinca                              |
| Lagerflora indica       | Crepe Myrtle                 | Vitis sp.                  | Grape*                                                |
| L. japonica             | Amur Privet                  | Weigela florida            | Old Fashioned Weigela                                 |
| L. japonicum            | Japanese Privet              | Yucca aloccifolia          | Spanish Bayonet, Yucca                                |
| L. lucidum              | Glossy Privet (Waxleaf)      | Y. filamentosa             | Adam's Needle                                         |
| L. lucidum              | Blue Blue Lily, Silver Mound |                            | *Do not use on food producing trees, vines or plants. |
| Lonicera japonica       | Japanese Honeysuckle         |                            | **Not for use on container grown plants.              |
| L. tatarica             | Tatarian Honeysuckle         |                            |                                                       |

**STORAGE AND DISPOSAL**

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

**Storage:** Store in original container in a locked storage area out of reach of children and domestic animals.

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

**Container disposal:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill, by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**NOTICE:** Buyer and user assume all risks and liability of use, storage and/or handling of this product not in accordance with the terms of this label.