| Alfalfa regions | Weeds controlled | Soil texture | Rate per acre |
|---|---|---|---|
| WA, OR, NV, UT, ID, MT, WY, CO, and the California counties of Del Norte, Siskiyou, Modoc, Shasta, Lassen, Plumas, Sierra, and Nevada | Downy brome (cheatgrass), tansymustard, prickly lettuce, pepperweed, spiking shepherds purse, yellow flower pepperweed | Sand and loamy sand<br>Sandy loam<br>Loam soil<br>Clay soil | DO NOT USE<br>0.9 lb<br>0.9-1.3 lbs<br>1.3-1.75 lbs |
| ND, SD, MN, WI, NE, KS, IA, IL, and NY | Henbit, wild mustard, common chickweed, knotweed (German weed), alyssum, downy brome (cheatgrass), wild oats, pepperweed, tansymustard, pigweed, speedwell, and seedlings of yellow rocket, shepherd scurvy, white cockle, fanweed (pennycress), dandelion, Russian thistle tasche | Sand and loamy sand<br>Sandy loam<br>Loam soil<br>Clay soil | DO NOT USE<br>0.9 lb<br>1.3 lbs<br>1.75 lbs |
| IL, IN, OH, KY, VA, PA, NJ, DE, MD, WV, VT, MA, CT, ME, NH, RI, and MO | Pigweed, common chickweed, mouseear chickweed, speedwell, henbit, knotweed (German weed), pepperweed, downy brome, alyssum, common tansymustard, wild oats, and seedlings of shepherdspurse, fanweed (pennycress), yellow rocket (wintercress), Russian thistle dandelion, tasche, white cockle | Sand and loamy sand<br>Sandy loam<br>Loam soil<br>Clay soil | DO NOT USE<br>0.9 lb<br>1.1 lbs<br>1.3 lbs |

**Pure Alfalfa Less Than One Year Old (Northeastern U.S. Only)**

Pure alfalfa which has been seeded in the spring before June 1 and has become well established may be treated in the fall after the last cutting but before permanently frozen ground conditions. Alfalfa may be actively growing, semi dormant, or dormant when this product is applied. Apply 0.9 lb. per acre to control henbit, wild mustard, common lambsquarters, common chickweed, German moss, alyssum, downy brome (cheatgrass), wild oats, tansymustard, pigweed, speedwell, and pepperweed.

**Established Alfalfa Orchardgrass Mixtures (Northeastern U.S. Only)**

Apply only to alfalfa orchardgrass mixtures which have been established at least one year. Make a single application in the fall after the alfalfa-orchardgrass mixture has gone dormant. Applications should be uniformly broadcast at the rate of 0.9 lb. per acre to control henbit, wild mustard, common lambsquarters, common chickweed, German moss, alyssum, downy brome (cheatgrass), wild oats, tansymustard, pigweed, speedwell, and pepperweed.

*Precautions* (For Each Use): 1) Do not use on gravelly, sand, or loamy sand soil, or on soil low in organic matter, as crop injury may occur. 2) Applications made to alfalfa growing on highly calcareous or highly alkaline soil may result in crop injury. 3) Use only in areas where frost occurs and alfalfa goes into a semidormant or dormant state. 4) Do not apply on snow. 5) This product will not control dodder and established perennial or biennial weeds such as dandelion, white cockle, quackgrass, cinquefoil, wild carrot, and dock. 6) Temporary crop chlorosis may appear on areas where overlapping occurs. The sprayer should be shut off when turning around at the end or corners of the field. 7) Do not rotate to any crops except corn for the growing season application as injury may occur.

*Note:* Allow 30 days between application and grazing of dairy and beef cattle and sheep, and allow 60 days between application and cutting for hay.

**Forage Bermudagrasses (South and Coastal and Midland)**

For preemergence control of most annual broadleaf and grassy weeds including barnyardgrass, crabgrass, *Brachiaria* spp., goosegrass, foxtail, carelessweed, carpetweed, annual morningglory, pigweed, common purslane, Russian thistle, common chickweed, henbit, and burclover. Apply this product shortly after spraying. Apply it to established bermudagrass from fall to spring depending on the weed problem, but before weed emergence. Use the appropriate rate in the following table in a minimum of 15 gals. of water per acre for ground application and in a minimum of 1 gal. of water for each 0.9-1.3 lbs. of the product per acre for aerial application.

| Soil texture | Rate per acre |
|---|---|
| Fine sandy soil low in organic matter | 0.9 lb |
| Sandy loam soil | 1.3-2.2 lbs |
| Loam and clay soil low in organic matter | 2.2-2.6 lbs |
| Clay soil | 2.6-3.5 lbs |

*Precautions:* 1) Do not use on bermudagrass in NM and the High Plains of TX. 2) Do not apply within 7 days after cutting.

*Note:* Do not graze dairy or beef cattle or sheep for 30 days after 0.9-2.6 lbs. per acre application or for 60 days after 3.5 lbs. per acre application. Do not cut for hay for 60 days after 0.9-2.6 lbs. per acre application or for 90 days after 3.5 lbs. per acre application.

**Corn**

Nitrogen solutions or complete liquid fertilizers may replace all or part of the water as a carrier. Do not apply after corn has emerged as there is danger of liquid fertilizers causing crop injury.

Preemergence: Apply before weeds and corn emerge. Use the appropriate rate in the table below.

Preplant: Apply in the spring after planting at the appropriate rate on the table below. Apply before, during or after normal seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation. Best results will be obtained when this product is applied within 2 weeks before planting.

*Note:* Under dry weather conditions, preplant applications may give better weed control.

| Soil texture | Broadcast* rate per acre |
|---|---|
| Coarse textured soil: Sand, silt, and loam that is low in organic matter | 2.2 lbs |
| Medium-textured soil: Soil containing a moderate amount of clay and organic matter | 2.6 lbs |
| Fine-textured soil: Loam that is high in organic matter and clay (including dark prairie soils of Corn Belt) | 3.3 lbs |
| Organic soil: Peat, muck, and high-organic silty | 4.4 lbs |

*For calculation of band treatment rate, see the General Information section.

To control quackgrass: Apply 3.3-4.4 lbs. per acre in the fall. Plow two to three weeks later, or if erosion is a problem, delay plowing until spring. Do not plant any crop except corn in the spring following treatment. Do not graze treated area.

*Note:* If weeds develop, particularly under relatively dry conditions, a shallow cultivation will generally result in better weed control.

*Precautions:* 1) Do not apply more than 4.4 lbs. per acre to corn per year. 2) Do not rotate to any crop except corn until the following year as injury may occur. 3) After harvest, plow and thoroughly till the soil in fall or spring to minimize possible injury to spring-seeded rotational crops, regardless of the rate used. 4) If more than 3.3 lbs. is used per acre for equivalent rate in a bandl, a crop of untreated corn should precede the next rotational crop. 5) Do not apply preplant incorporated in corn in the High Plains and Intermountain areas of the West (including central and western KS, western NE, western OK, and the Panhandle of TX) where rainfall is sparse and erratic or where irrigation is required. 6) In the High Plains and Intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required, use this product to control weeds in corn only when corn is to follow corn or when a crop of untreated corn is to precede another rotational crop. 7) In western MN and eastern parts of the Dakotas and KS, do not plant soybeans following corn treated with this product if more than 2.2 lbs. per acre for equivalent rate in a bandl was applied as injury may occur. 8) Injury may occur to soybeans planted in north-central and northwest IA, south central and southeast MN, northeast NE, southeast SD, and other areas the year following application on soils having a calcareous surface layer. 9) Do not plant sugar beets, tobacco, vegetables (including dry beans), spring seeded small grains, or small-seeded legumes and grasses the year after application, as injury may occur.

**Tank Mixtures on Corn**

*Atrazine:* Use this product in a preplant or preemerge tank mixture with Griffin 99, Griffin 80W, or Atrazine 4L, for control of many annual weeds, including carpetweed, crabgrass, fall panicum, barnyardgrass, cocklebur, pigweed, ragweed, and velvetleaf. Refer to the Atrazine label for directions.

*Sugarcane*

Apply 2.2-4.4 lbs. per acre at planting or after harvest. If ratoon crop is to be grown, but before sugarcane emerges. This product may also be applied lineline directed or over the sugarcane to provide control of germinating weeds.

*Precautions:* 1) Do not apply more than one 2.2-4.4 lbs. application per the plants or more than two lineline directed applications. 2) Do not apply after "cane in." 3) Total application should not exceed 11.1 lbs. per acre crop cycle.

*Note:* Do not feed or graze treated forage to livestock.

**Grasses Grown for Seed (Pacific Northwest Only)**

Perennial ryegrass, Highland or Astoria bentgrass, tall fescue, and fine fescues such as Bishop, Reliance, Pennlawn, Cheviots, and related species. For the control of broadleaf weeds and annual grasses including annual ryegrass, rattail fescue, silver hairgrass, and downy brome (cheat), apply 2.2 lbs. in a minimum of 15 gals. of water per acre as soon as fall rains start. Early application is important.

*Precaution:* Apply only to grasses from which at least one seed crop has been cut.

*Note:* Allow 30 days between last application and grazing of dairy and beef cattle and sheep, and allow 60 days between the last application and cutting for hay.

## NURSERIES, CHRISTMAS TREE PLANTINGS, SHELTERBELTS

**Nurseries (see list below)**

Apply 2.2-3.4 lbs. in at least 25 gals. of water per acre in fall or spring at least one year after transplanting.

**Christmas Tree Plantings and Shelterbelts (see list below)**

Remove weed growth before application. Apply 2.2-4.4 lbs. in at least 25 gals. of water per after transplanting. Use the same rate for annual maintenance applications.

For quackgrass control apply 4.4 lbs. per acre in the fall or apply a split application of 2.2 lbs. per acre in the fall plus 2.2 lbs. per acre in early spring after quackgrass begins growth.

*Precautions:* 1) Do not use on seedbeds or cutting beds. 2) In CA, OR, and WA do not apply to Christmas trees or shelterbelt transplants less than three years of age. 3) Do not apply more than once a year, except as directed for quackgrass control.

Apply to these species of trees and shrubs as recommended above.

| Conifers | | Deciduous Trees and Woody Ornamentals | |
|---|---|---|---|
| arborvitae | Norway spruce | American elm | *Rhus* spp. |
| Austrian pine | red spruce | Siberian elm | (max. 3.5 lbs./A) |
| *Bishop pine | white spruce | barberry | red oak |
| *Brazilian pine | balsam fir | boxelder | Russian olive |
| (Chilean pine) | Douglas fir | bush honeysuckle | *oleander |
| ponderosa pine | Fraser fir | caragana | *plum (2.2 lbs./A) |
| (Jeffrey pine) | white fir | cotoneaster | *bottle brush |
| *Monterey pine | hemlock | dogwood | *carob |
| Mugho pine | juniper | eucalyptus | |
| red pine | red cedar | holly (*Ilex* spp.) | |
| (Norway pine) | white cedar | (max. 3.5 lbs./A) | |
| Scotch pine | yew (*Taxus* spp.) | honey locust | |
| white pine | | Oregon grape | |
| blue spruce | | (*Mahonia* spp.) | |

*For CA only

## TREE PLANTATIONS FOR TIMBER

Apply in the spring before weeds emerge or following removal of weed growth. Apply before or after seedling transplanting. If applying after transplanting, application may be made over the top of tree seedlings before new growth appears. If new growth is present, direct the spray to avoid tree foliage contact. Do not use on seed nurseries or injury may occur. Apply only once per year.

The following rates are based on broadcast treatment in 20-100 gals. of water per acre. For band or spot application, reduce the broadcast rate in proportion to the area actually sprayed.

**Black Walnuts**

Apply 2.2-4.4 lbs. per acre.

**Slash Pine and White Pine**

Use for establishment in the South only. Apply 4.4-6.6 lbs.

**Loblolly Pine**

Use for establishment in the South only. Apply either 4.4-6.6 lbs. of this product per acre or a tank mix of 1.6-5.3 lbs. of this product plus 1.2 lbs. of Griffin 80W for 0.9-1.76 lbs. Griffin 80 or 0.8-1.8 qts. Griffin Atrazine 4L per acre. The tank mix provides broad spectrum annual weed control as well as control of perennial weeds. Refer to the Atrazine section of this label and better weed control in limited rainfall areas than this product alone.

## TURF GRASSES FOR SOD

**St. Augustine, Centipede, and Zoysia Grass**

Apply 2.2-4.4 lbs. per acre, according to soil texture as listed below.

| | | | |
|---|---|---|---|
| Muck or peat | 4.4 lbs. | Old beds | within 2 days after lifting of sod |
| | | New beds | 3-4 days after sprigging or plugging |
| Sandy soil | 2.2 lbs. | Old beds | within 2 days after lifting of sod |
| | | New beds | 7-10 days after sprigging or plugging |

If weeds regrow, apply an additional 2.2 lbs. on muck or peat, or 1.1 lbs. on sandy soil.

*Precautions:* 1) Do not apply within 30 days before cutting or lifting. 2) Do not use north of NC.

## VEGETABLE CROPS

**Asparagus (Established)**

Apply 2.2-4.4 lbs. per acre to beds established one year or more. Apply once per year either after disking in the spring before weeds emerge, or following harvest after removal of existing weed growth. Spring application must be made at least 3 days before first cutting.

*Precautions* (WA and OR only): 1) Do not apply to gravelly, sand, or loamy sand soil as crop injury may result. 2) Do not allow irrigation water to stand or to form pools in the field as injury may occur.

**Artichokes**

Apply 2.2-4.4 lbs. per acre as a directed spray after the last fall tillage.

*Precautions:* 1) Do not apply to gravelly, sand, or loamy sand soil. 2) Apply only once per year.

## NONSELECTIVE WEED CONTROL ON NONCROP LAND

Best results are obtained when this product is applied before weeds emerge. If weed growth has begun and removal is not feasible, include a contact or translocated herbicide in the spray.

This product provides long term weed control on industrial areas, highway medians and shoulders, railroad rights of way, lumberyards, petroleum tank farms, and in noncrop areas on farms such as around buildings, equipment and fuel storage areas, along fences, roadsides, and ditches. Do not use this product for nonselective weed control on land to be cropped, near adjacent desirable trees, shrubs, or plants, or in greenhouses, as injury may occur. Aerial applications may be made where it is feasible.

Use at least 1 gal. of water for each 0.9 lb. of this product; use more water if practical for both ground and aerial applications.

To control annual broadleaf and grass weeds (including barnyardgrass, chess, crabgrass, common lambsquarters, foxtail, ragweed, puncturevine, and turkey mullein) apply 0.3-1.1 lbs. per acre.

To control most annual and many perennial broadleaf and grass weeds (including quackgrass, bluegrass, redtop, burdock, Canada thistle, orchardgrass, purslane, smooth brome, dogfennel, and plantain) apply 1.1-2.2 lbs. per acre.

To control hard-to-kill perennial weeds (including bull thistle and saw thistle) apply 2.2-4.4 lbs. per acre.

For longer residual control in regions of high rainfall and a long growing season, apply 2.2-4.4 lbs. per acre.

## NOTICE OF WARRANTY

GRIFFIN warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for the purposes stated on such label only when used in accordance with the directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of GRIFFIN. In no case shall GRIFFIN be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. GRIFFIN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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## FRUIT AND NUT CROPS

Apply the spray to the orchard or vineyard floor avoiding contact with fruit, foliage or stems. Apply only to orchards or groves where trees have been established one year or more unless specified differently. Make only one application per year except as noted otherwise. Recommended rates are based on broadcast treatment. For band applications or spot applications around fruit or nut trees, reduce the broadcast rate of the product and water per acre in proportion to the area actually sprayed.

**Almonds and Pecans (CA only)**

Apply 1 1-2 2 lbs. per treated area in a 2-4 ft. band on each side of the tree row. Apply before weeds emerge in late fall or early winter. Weeds controlled by 1 1 lbs.: rabbit burclover, common chickweed, wild mustard and shepherdspurse. Apply only once per year.

Precautions: 1) Do not treat trees established in the grove less than 3 years. 2) Do not treat the Mission (Texas) variety of almonds. 3) Do not apply to almond trees propagated on prune rootstocks. 4) Do not replant almonds or peaches in treated area for 12 months after treatment. 5) Do not apply on gravelly sand, or loamy sand soil or on soil with less than 1% organic matter. 6) Do not treat areas where water will accumulate.

**Apples, Pears, Sour Cherries**

Apply 2 2-4 4 lbs. per acre.

**Avocados**

CA and FL only: Apply 2 2-4 4 lbs. per acre after final preparation of grove.

Precaution: Do not apply on gravelly sand, or loamy sand soil.

**Blackberries and Cane berries (blackberries, boysenberries, loganberries, raspberries)**

Apply 2 2-4 4 lbs. per acre in the spring or apply a split application of 2 2 lbs. per acre in the spring plus 2 2 lbs. per acre in the fall. Apply in a minimum of 40 gals. of water per acre.

On plantings less than 6 months old use ½ the above rate.

To control quackgrass apply 4 4 lbs. per acre in the fall or split the application applying 2 2 lbs. per acre in the fall plus 2 2 lbs. per acre in the spring when quackgrass is actively growing.

Note: Do not apply when fruit is present.

**Cranberries**

MA: Apply up to 4 4 lbs. per acre either before spring growth begins or in the fall after harvest.

Other areas: Apply 2 2 lbs. per acre before spring growth begins.

**Filberts**

Apply 2 2-4 4 lbs. per acre in the fall or apply a split application of 2 2 lbs. per acre in the fall plus 2 2 lbs. per acre in the spring.

Precautions: 1) If trees are planted on a hillside, excessive soil erosion may result from the dormant weeds. 2) Do not apply on gravelly, sand, or loamy sand soil.

Note: Do not apply when nuts are on the ground during the harvest period.

**Grapes**

Apply 2 2-5 3 lbs. per acre any time between harvest and early spring.

Precaution: Do not use in vineyards established less than three years. Do not apply on gravelly sand or loamy sand soil.

**Grapefruit, Lemons, Oranges**

AZ (Lemons, Oranges only): Apply a split application of 1 75 lbs. per acre in the spring plus 1 75 lbs. per acre in the fall.

CA: In grapefruit, apply 2 2-4 4 lbs. per acre. In lemons and oranges, apply 2 2-4 4 lbs. per acre in a single application, or apply 2 2 lbs. per acre in the fall and 2 2 lbs. per acre in the spring. Do not use in the Imperial, Coachella, or Palo Verde valleys.

FL (Grapefruit and Oranges only): Apply once per year. For control of weeds listed under General Information, apply 7 1-10 6 lbs. per acre in the spring. To also control milkweed vine, use 8 9-10 6 lbs. per acre either in the spring or in the fall. Apply 4 4-5 3 lbs. per acre.

Precautions (All areas): 1) Do not use in nurseries. 2) Do not apply to bedded grapefruit, lemons, or oranges. 3) To avoid possible injury, do not apply to trees under stress from freeze damage for one year after the freeze.

**Macadamia Nuts**

Apply 2 2-4 4 lbs. in 50 gals. of water per acre before harvest and just prior to weed emergence. Repeat application as necessary. Do not apply when nuts are on the ground during the harvest period.

**Olives**

Apply 2 2-4 4 lbs. per acre following grove preparation in the fall. Repeat annually in subsequent years.

**Peaches, Plums, Sweet Cherries**

Apply 1 75-4 4 lbs. per acre. Apply in late fall to early spring prior to weed emergence.

Precautions: 1) Do not apply on gravelly, sand, or loamy sand soil. 2) Peaches use only in AR, LA, MS, NC, TX and states east of the Miss. River. For CA, see specific directions in the section "Almonds and Peaches (CA only)". 3) Plums and sweet cherries: use only in MO and states east of the Miss. River except TN.

**Pecans**

Apply the appropriate rate in the following table before weeds emerge in the spring.

| Soil texture | Rate per acre |
|---|---|
| Sand, loamy sand | DO NOT USE |
| Sandy loam | 2 2 lbs |
| Loam or clay soil low in organic matter | 2 2-3 1 lbs |
| Clay soil high in organic matter | 3 1-4 4 lbs |

Precautions: Do not use west of the Pecos River in TX or in NM, AZ or CA as injury may occur. Do not make applications to transplanted trees that have been established less than two years in the grove as injury may occur.

Note: Do not apply when nuts are on the ground. Do not allow drumhead to grow in treated areas.

**Strawberries (OR and WA only)**

For control of chickweed, groundsel, mustard, and shepherdspurse, apply broadcast 1 1 lbs. per acre. In fields where overhead irrigation is used to activate the product, apply after harvest, at time of bed renovation. In fields where overhead irrigation is not available, apply during early October through November.

Precautions: Make only one application per growing season. Do not apply within 6 months after transplanting. Limit overhead irrigation to 4 hrs. immediately following post-harvest application. Do not use on sand.

**Walnuts**

Apply 2 2-4 4 lbs. per acre.

Precautions: 1) Do not apply on gravelly, sand, or loamy sand soil. 2) Leveling and harrowing before or after application will lessen effectiveness of weed control.

Note: Do not apply when nuts are on the ground.

## FIELD AND FORAGE CROPS

**Alfalfa**

Pure alfalfa at least one year old and alfalfa orchardgrass mixtures at least one year old.

For ground application: apply the product in a minimum of 15 gals. of water per acre. Avoid forward drift, release of or part of the water used as a carrier, except fluid fertilizers should not be used on alfalfa in actively growing stage as injury may occur.

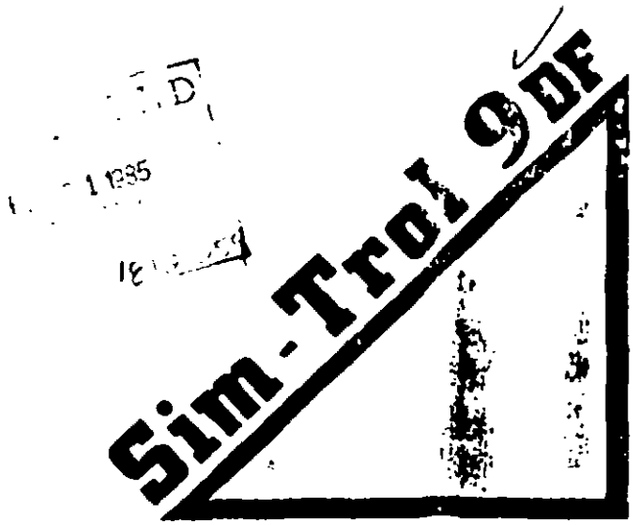
For aerial application: apply the product in a minimum of 2½ gals. of water per acre.

Pure Alfalfa At Least One Year Old (All Areas Listed)

Apply once a year in the fall after the last cutting but prior to permanently frozen ground conditions. Alfalfa may be actively growing, undormant, or dormant when the application is made.

Alfalfa must be growing at least [illegible] before treatment.

**RESTRICTED USE PESTICIDE**
For retail sale to and application only by certified applicators or persons under their direct supervision.




# DRY FLOWABLE HERBICIDE

**For Weed Control in certain crops, ornamental plantings, or industrial sites and around-the-farm.**

| | |
|---|---|
| ACTIVE INGREDIENT | |
| Simazine (2-chloro-4,6-bis(ethylamino)-s-triazine) | 90.0% |
| INERT INGREDIENTS | 10.0% |
| TOTAL | 100.0% |

KEEP OUT OF REACH OF CHILDREN

## CAUTION

STATEMENT OF PRACTICAL TREATMENT

**If swallowed,** drink 1 or 2 glasses of water. Induce vomiting, by placing finger in back of throat. Call a physician. Never give anything by mouth to an unconscious person.

**If inhaled,** remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

**If on skin,** remove by washing.

**If in eyes,** flush with plenty of water. Get medical attention if irritation persists.

**See** Side Panel For Additional Precautionary Statements


Griffin

GRIFFIN CORPORATION
VALDOSTA, GEORGIA 31601
NET CONTENTS 25 lbs
EPA Reg. No. 1812-258
EPA Est. No. 1812-GA-3



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## PRECAUTIONARY STATEMENTS
## HAZARDS TO HUMANS & DOMESTIC ANIMALS
## CAUTION

Harmful if swallowed, inhaled or absorbed through the skin. Do not get in eyes or on skin. Do not breathe spray mist. Wash thoroughly after handling. If swallowed, induce vomiting. Get medical attention. If inhaled, contact your nearest Poison Control Center. If on skin, remove by washing. Get medical attention if irritation persists. If in eyes, flush with plenty of water. Get medical attention if irritation persists.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

## ENVIRONMENTAL HAZARDS

Do not apply directly to water. Do not contaminate water by cleaning of equipment, or disposal of wastes.

Simazine is a chemical which can travel (seep or leach) through soil and can contaminate ground water which may be used as drinking water. Simazine has been found in ground water as a result of agricultural use. Users are advised not to apply Simazine where the water table (ground water) is close to the surface and where the soils are very permeable, i.e. well drained soils such as sandy soils. Your local agricultural agencies can provide further information on the type of soil in your area and location of ground water.

## DIRECTIONS FOR USE

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

## STORAGE AND DISPOSAL

Store in dry place. Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of the 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 or by incineration, or, if allowed by State and local authorities, by burning. If burning, stay out of smoke.

## GENERAL INFORMATION

Applied as a pre-emergence before weeds emerge or after removal of weed growth. It controls a wide variety of annual broadleaf and grass weeds when used at selective rates in agricultural crops and ornamental plantings. When used at higher nonselective rates in noncrop areas, it also controls many perennial broadleaf and grass weeds.

When a range of applications rates is given, use the low rate on coarser textured soil and soil higher in organic matter.

Since this product enters weeds mainly through their roots, moisture is needed to move it into the root zone. Very dry soil conditions and lack of rainfall following application may necessitate shallow cultivation.

This product is noncorrosive to equipment, nonflammable, and has low electrical conductivity.

**FAILURE TO FOLLOW PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR WEED CONTROL, AND/OR ILLEGAL RESIDUES.**

## ANNUAL WEEDS CONTROLLED

| | | |
|---|---|---|
| [illegible] | Pigeye pamsbrush | ratstail fescue |
| annual bluegrass | Florida pusley | redroots |
| annual [illegible] | fescues | Russian thistle |
| [illegible] | gumweeds | shepherdspurse |
| [illegible] | pigweed | spiderwortse |
| [illegible] | henbit | (Bitacheria spp.) |
| [illegible] | [illegible] | [illegible] |
| [illegible] | kochia (Common [illegible]) | smartweed |
| [illegible] | common lambsquarters | spanishneedles |
| [illegible] (Digitaria spp.) | nightshade | speedwell |
| [illegible] (cheatgrass) | peppergrass | tansymustard |
| [illegible] | pigweed | wild mustard |
| [illegible] | prickly lettuce | wild oats |
| [illegible] | [illegible] purslane | witchgrass |
| [illegible] | ragweed | yellow flower |
| | | pepperweed |

## EQUIPMENT

Spray Application: Use conventional ground sprayers equipped with nozzles that provide accurate and uniform application. Be certain that nozzles are uniformly spaced and the same size. Calibrate sprayer before use and for horse at the start of each season and when changing carriers.

Size pump capacity to (1) maintain 35-40 psi at nozzles, (2) provide sufficient agitation in tank to keep [illegible] in suspension, and (3) to provide a minimum of 20% bypass at all times. Use centrifugal pumps which provide smoother shear action for dispersing and mixing this product. The pump should provide a minimum of 10 gals./minute/100 gals. tank also circulated through a correctly positioned sparger tube or [illegible].

Use screen to protect the pump and to prevent nozzles from clogging. Screens placed on suction side of pump should be 16 mesh or coarser. Do not place a screen in the recirculation line. Use 50 mesh or coarser screens between the pump and boom, and where required, at the nozzles. Check nozzle manufacturer's recommendations.

Aerial Application: Use aerial application only where specified in the use directions. Screens in nozzles, as well as those in suction and in line strainers, should be no finer than 50-mesh.

Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Avoid application directly to animals or humans. Although it is unnecessary for flagmen or loaders to wear protective clothing or equipment, they should avoid inhalation of dust or spray mist and prolonged contact with skin. Flagmen and loaders should wash thoroughly before eating and at the end of each day's operation.

## MIXING INSTRUCTIONS

Unless otherwise specified, use a minimum of 20 gals. of spray mixture per acre for all applications with ground equipment. For aerial application, apply a minimum of 1 gal. of water for each 1.1 lbs. applied per acre.

Water: (1) Be sure sprayer is clean and not contaminated with any material, as crop injury or sprayer clogging may result. (2) Fill tank ¾ full with clean water, and start agitation. (3) Be certain that the agitation system is working properly and creates a rippling or rolling action on the liquid surface. (4) Pour product directly from bag into tank. (5) Continue filling tank until 80% full, increase agitation if necessary to maintain vigorous action. (6) Add tank mix herbicides. (7) Complete filling tank, maintaining sufficient agitation at all times to ensure surface action. This applies to both spray and nurse tanks. (8) Immediately after use, clean sprayer thoroughly by flushing system with water containing a detergent.

Liquid Fertilizer: (1) Nitrogen solutions or complete liquid fertilizer may replace all or part of the water as a carrier for application in dilute sprays. Before mixing, always check for compatibility. To check the pot pro[illegible] of this product and the liquid fertilizer being used, into a clean jar, fill 2/3 full with water, add 1 pint of liquid fertilizer and one gal. of this product in 1 pint of liquid fertilizer. After shaking gently for 30 seconds, let stand for 5 minutes. If the fertilizer herbicide combination remains mixed or can be remixed readily, the mixture is compatible and can be sprayed. If it is not compatible, make a water mix with the herbicide before adding fertilizer and use the mixture only if the test shows it is compatible. To prevent maintain agitation. (2) If the product is compatible with liquid fertilizer, follow the mixing procedures in water – steps 1-8. Perform the compatibility test as outlined in (1) above the herbicide tank mixtures also.

## [illegible] TREATMENT

The amount of this product needed for band treatment may be calculated by the formula:

[illegible] width in inches × broadcast [illegible] per acre = amount needed per acre of field

[illegible] width in inches

## ROTATIONAL CROPS AND PERENNIAL CROP REPLANTING

Avoid crop injury, observe the following precautions:

(1) Before treating land the following application, plant only corn, unless otherwise stated in the label. (2) If [illegible] crops or if replanting land to crops other than corn, do not apply this product in the year [illegible] planting these crops.

## FRUIT AND NUT CROPS

Apply the spray to the orchard or vineyard floor avoiding contact with fruit, foliage, or stems. Apply only to orchards or groves where trees have been established one year or more unless specified differently. Make only one application per year, except as noted otherwise. Recommended rates are based on broadcast treatment. For band applications or spot applications around fruit or nut trees, reduce the broadcast rate of this product and water per acre in proportion to the area actually sprayed.

**Almonds and Peaches (CA only)**

Apply 1.1-2.2 lbs. per treated acre in a 2-4 ft. band on each side of the tree row. Apply before weeds emerge in late fall or early winter. Weeds controlled by 1.1 lbs. include burclover, common chickweed, wild mustard and shepherdspurse. Apply only once per year.

> *Precautions:* (1) Do not treat trees established in the grove less than 3 years. (2) Do not treat the Mission (Texas) variety of almonds. (3) Do not apply to almond trees propagated on plum rootstocks. (4) Do not replant almonds or peaches in treated soil for 12 months after treatment. (5) Do not apply on gravelly sand or loamy sand soil or on soil with less than 1% organic matter. (6) Do not treat areas where water will accumulate.

**Apples, Pears, Sour Cherries**

Apply 2.2-4.4 lbs. per acre.

**Avocados**

CA and FL only: Apply 2.2-4.4 lbs. per acre after final preparation of grove.

> *Precaution:* Do not apply on gravelly, sand, or loamy sand soil.

**Blueberries and Canebarries (blackberries, boysenberries, loganberries, raspberries)**

Apply 2.2-4.4 lbs. per acre in the spring or apply a split application of 2.2 lbs. per acre in the spring plus 2.2 lbs. per acre in the fall. Apply in a minimum of 40 gals. of water per acre.

On plantings less than 6 months old use ½ the above rate.

To control quackgrass apply 4.4 lbs. per acre in the fall or split the application applying 2.2 lbs. per acre in the fall plus 2.2 lbs. per acre in the spring, when quackgrass is actively growing.

Note: Do not apply when fruit is present.

**Cranberries**

MA: Apply up to 4.4 lbs. per acre either before spring growth begins or in the fall after harvest.

Other areas: Apply 2.2 lbs. per acre before spring growth begins.

**Filberts**

Apply 2.2-4.4 lbs. per acre in the fall or apply a split application of 2.2 lbs. per acre in the fall plus 2.2 lbs. per acre in the spring.

> *Precautions:* (1) If trees are planted on a hillside, excessive soil erosion may result from the elimination of weeds. (2) Do not apply on gravelly sand, or loamy sand soil.

*Note:* Do not apply when nuts are on the ground during the harvest period.

**Grapes**

Apply 2.2-5.3 lbs. per acre any time between harvest and early spring.

> *Precaution:* Do not use in vineyards established less than three years. Do not apply on gravelly sand or loamy sand soil.

**Grapefruit, Lemons, Oranges**

AZ (Lemons, Oranges only): Apply a split application of 1.75 lbs. per acre in the spring plus 1.75 lbs. per acre in the fall.

CA: In grapefruit, apply 2.2-4.4 lbs. per acre. In lemons and oranges, apply 2.2-4.4 lbs. per acre in a single application, or apply 2.2 lbs. per acre in the fall and 2.2 lbs. per acre in the spring. Do not use in the Imperial, Coachella, or Palo Verde valleys.

FL (Grapefruit and Oranges only): Apply once per year. For control of weeds listed under General information, apply 7.1-10.6 lbs. per acre in the spring. To also control chickweed vine, use 8.8-10.6 lbs. per acre either preemergence or before vines are 12 inches see[illegible].

TX (Grapefruit and Oranges only): Apply 4.4-5.3 lbs. per acre.

> *Precautions* (All areas): 1) Do not use in Arizona. 2) Do not apply to bedded grapefruit, lemons or oranges. 3) To avoid possible injury, do not apply to trees under stress from freeze damage for one year after the freeze.

**Macadamia Nuts**

Apply 2.2-4.4 lbs. in 50 gals. of water per acre before harvest and just prior to weed emergence. Repeat application as necessary. Do not apply when nuts are on the ground during the harvest period.

**Olives**

Apply 2.2-4.4 lbs. per acre following grove preparation in the fall. Repeat annually in mulchwear.

**Peaches, Plums, Sweet Cherries**

Apply 1.75-4.4 lbs. per acre. Apply in late fall to early spring prior to weed emergence.

> *Precautions:* (1) Do not apply on gravelly, sand, or loamy sand soil. 2) Peaches use only in AR, LA, MO, OK, TX, and states east of the Miss. River. For CA, see specific directions in the section "Almonds and Peaches (CA only)." 3) Plums and sweet cherries use only in MO and states east of the Miss. River except TN.

**Pecans**

Apply the appropriate rate in the following table before weeds emerge in the spring.

| Soil texture | Rate per acre |
|---|---|
| Sand, loamy sand | DO NOT USE |
| Sandy loam | 2.2 lbs. |
| Loam or clay soil low in organic matter | 2.2-3.1 lbs. |
| Clay soil high in organic matter | 3.1-4.4 lbs. |

> *Precautions:* Do not use west of the Pecos River in TX or in NM, AZ, or CA as injury may occur. Do not make applications to transplanted trees that have been established less than two years in the grove as injury may occur.

*Note:* Do not apply when nuts are on the ground. Do not allow animals on grass treated areas.

**Strawberries (OR and WA only)**

For control of chickweed, groundsel, mustard, and shepherdspurse, apply broadcast 1.1 lbs. per acre. In fields where overhead irrigation is used to activate the product, apply after harvest, at time of bed renovation. In fields where overhead irrigation is not available, apply during early October through November.

> *Precautions:* Make only one application per growing season. Do not apply within 4 months after transplanting. Limit overhead irrigation to ½ inch immediately following post harvest application. Do not use on sand.

**Walnuts**

Apply 2.2-4.4 lbs. per acre.

> *Precautions:* 1) Do not apply on gravelly, sand, or loamy sand soil. 2) Cultivating and turbulent water after application will lessen effectiveness of weed control.

*Note:* Do not apply when nuts are on the ground.

## FIELD AND FORAGE CROPS

**Alfalfa**

Pure alfalfa at least one year old, and alfalfa orchardgrass mixtures at least [illegible] year old.

For glume application: apply this product in a minimum of 15 gals. of water per acre. This formula may replace all or part of the water used as a carrier. Except fixed fertilizers should not be used when alfalfa is actively growing, or injury may occur.

For aerial application: apply this product in a minimum of 2½ gals. of water per acre.

Pure Alfalfa At Least One Year Old (All Areas Usual):

Apply once a year in the fall after the last cutting but prior to permanently frozen ground conditions. Alfalfa may be actively growing, [illegible] or dormant when the application is made.

[illegible]

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